

JPRS-UNE-86-016

29 DECEMBER 1986

546-417-77
144 pgs
994 cys

USSR Report

NATIONAL ECONOMY

EKO: ECONOMICS AND ORGANIZATION OF
INDUSTRIAL PRODUCTION

No 9, SEPTEMBER 1986



FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

29 DECEMBER 1986

USSR REPORT

NATIONAL ECONOMY

EKO: ECONOMICS AND ORGANIZATION OF
INDUSTRIAL PRODUCTION

No 9, SEPTEMBER 1986

Except where indicated otherwise in the table of contents the following is a complete translation of the Russian-language monthly journal EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA published in Novosibirsk.

CONTENTS

Crucial Problems of Economic Theory

Institute Director Interviewed on Role of Science (3-16)	
(L. I. Abalkin)	1
Social Processes in Management Analyzed (16-34)	
(R. V. Ryvkina)	11
Experience of Leading Enterprises	
Kirov Tire Plant Uses Difficulties to Advantage (35-48)	
(F. I. Yashunskaya)	25
Kirov Plant Information Service Discussed (48-51)	
(N. V. Sidorova)	34
Compromise Sometimes Needed for Progress (51-57)	
(N. S. Goloshumov, A. D. Khlupin)	37
Excellence Not Always Rewarded (58-61)	
(V. S. Yarovenko, L. A. Gontsov)	43

New Value System Created at Kirov Plant (61-84)	
(Nina Maksimova)	46
Maintaining Leading Position Discussed (85-92)	
(Yu. A. Vorobyev)	58
Industry and the Food Program	
Benefits From Technical Equipment in Agriculture Disclosed (93-111)	
(S. V. Moskvina)	64
Changes in Agricultural Equipment Examined (106-111)	
(V. V. Shlykov)	74
The Reader Develops the Subject	
Readers Respond to Sociology Article (112-121)	
(T. I. Zaslavskaya)	78
Response Made to Housing Construction Suggestion (122-127)	
(V. A. Belichenko)	87
Portraits of Businesspeople	
Successful Businessman's Career Sketched (128-144)	
(Tatyana Boldyreva)	92
Commentary	
Abuses of Inspection Work Revealed (145-156)	
(Mikhail Rechkin)	105
Management of the Economy of Socialist Countries	
Economic Independence in CEMA Countries Discussed (157-174)	
(N. V. Bautina)	115
Advice to the Businessmen	
Ethics of Work Relations Examined (175-184)	
(G. V. Vyatkin, A. F. Katayev)	127
Among Books	
Book on Economic Balance Reviewed (185-190)	
(Ye. G. Yasin)	135

PUBLICATION DATA

English title : EKO: ECONOMICS AND ORGANIZATION
OF INDUSTRIAL PRODUCTION No 9,
Sep 1986

Russian title : EKO: EKONOMIKA I ORGANIZATSIYA
PROMYSHLENNOGO PROIZVODSTVA

Author(s) :

Editor(s) : A. G. Aganbegyan

Publishing House : Izdatelstvo "Nauka"

Place of Publication : Novosibirsk

Date of Publication : Sep 1986

Signed to press : 25 Jul 1986

Copies : 154,000

COPYRIGHT : Izdatelstvo "Nauka", "Ekonomika
i organizatsiya promyshlennogo
proizvodstva", 1986

INSTITUTE DIRECTOR INTERVIEWED ON ROLE OF SCIENCE

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 3-16

[Interview with L. I. Abalkin, corresponding member of the USSR Academy of Sciences, Director of the Institute of Economics of the USSR Academy of Sciences, by I. S. Melenevskiy and T. M. Boyko: "The Pivot of Economic Life"]

[Text] [Question] Leonid Ivanovich, under modern conditions with the restructuring of the economy and the economic mechanism, it becomes more important than ever before to rely on science. At the 27th Party Congress they discussed the fact that, on the basis of the requirements of life, it is necessary to take a new look at certain theoretical ideas and concepts: at the interaction between productive forces and production relations, socialist property and economic forms of its realization, commodity-monetary relations and so forth.

[Answer] Yes, there is a critical need to figure out these most complicated problems. We link all the advantages of the socialist system to the establishment of socialist property: planning and proportionality, prerequisites of high effectiveness, the possibility of development without crises, and so forth. As was noted in the political report of the Central Committee, the socialist property has rich content and includes the multifaceted system of relations among people, collectives, branches, and regions of the country in the utilization of the means and results of production and an entire range of economic interests. This complicated complex of relations requires a certain combination and constant regulation, the more so since it is in movement.

Without a profound theoretical interpretation of the essence of public property it is impossible to understand the real economic processes or to make correct practical decisions. It is known that the empirical path and method of trial and error are costly. It would seem that today it is no longer enough to limit ourselves to general, undoubtedly correct assertions to the effect that private property impedes the development of modern productive forces and public property creates an unlimited space for them. Life has shown that in and of itself public property does not guarantee success and under the conditions of its predominance, obstacles can arise on the path to the development of productive forces and the assimilation of scientific and technical achievements.

Thus in the second half of the 1970's difficulties began to increase in the national economy and the rates of economic growth slowed down considerably. The average annual rates of increase of the national income used for consumption and accumulation in 1961-1975 were 5.3 percent, 1976-1980—3.9 percent, and for industrial output these figures were 7.4 and 4.4 percent, respectively. At the beginning of the 1980's the unfavorable tendency became stronger. In 1982 the rate of growth of the national income decreased to 3.5 percent, and industrial output—to 2.9 percent, the increase in the real incomes of the population actually came to a halt, and the introduction into production of advanced scientific and technical achievements slowed up appreciably. This was reflected in the fulfillment of the assignments of the 11th Five-Year Plan. I am discussing this in order to emphasize that in reality the link between the economic basis of our social system and concrete economic and social results is complicated and mediated. In order to be fully realized and manifested, socialist property must be given various forms. And these forms must constantly correspond to the changing conditions of economic life and the level of development of productive forces, that is, they must change promptly along with them. Sometimes the forms of realization of socialist property can be transformed from a stimulus to progress into an impediment.

[Question] Are you drawing such a serious conclusion as a result of an analysis of the situation that has arisen during the past two five-year programs?

[Answer] No. Our country has already come up against such a situation. At the turn of the decade, between the 1930's and 1940's, when socialism had already been constructed in the USSR public property was established and suddenly the rates of economic growth dropped, the introduction of advanced technical equipment deteriorated appreciably, capital construction was halted...that is, processes took place which are similar to today's. They were analyzed at the 18th Party Conference held in February 1941 and measures were earmarked for emerging from the situation. But the war and the subsequent restoration of the destroyed economy made it impossible to figure out these processes. There arose the opinion that this was a single phenomenon, a particularity. People have tried to forget about it.

But the situation was repeated at the beginning of the 1960's when productive forces that had increased many times over seemed to be stopped by some kind of obstacle. Certain decisions adopted in March-September 1965, which laid the basis for the economic reform and then were reinforced by the 23rd Party Congress, became a sufficiently powerful accelerator of the development of the national economy. The five-year plan of 1966-1970 turned out to be the best of all the subsequent ones with respect to economic indicators (the average annual rate of growth of the national income used for consumption and accumulation was 7.2 percent and industrial output—8.7 percent).

[Question] You used the expression "some obstacle."

[Answer] Yes, because then too the economists did not make sufficient generalizations and did not attempt to give a deep theoretical explanation for

what was taking place. Now, when the situation has arisen for the third time, it has become obvious that we are not faced with a one-time phenomena. Such phenomena will be inevitable as long as we stand still when it comes to improving the forms of economic realization of social property. It is time to give a clear-cut answer to the questions: when, under what conditions and how precisely do the units (subsystems) of production relations begin to hold back socioeconomic progress and what specifically should be done to accelerate it?

I wish to draw attention to one more fundamental approach which was reflected in the political report of the Central Committee, the speeches of the delegates to the Congress and the new edition of the CPSU Program. Up to this point many negative phenomena in the economy had been explained, as a rule, by noneconomic factors. For instance, the influx of labor force decreased because of the unfavorable demographic factors, the bad weather was mainly to blame for the poor harvest, and the deteriorating conditions for extraction caused the reduction of the extraction of minerals. Sometimes, to be sure, to such a list of factors they have added mistakes in educational work, blunders in planning activity and certain others. But they have all been outside the framework of economic life. The 27th Party Congress emphasized that it is primarily economic factors that lie at the basis of the acceleration or retardation of the development of the national economy. Yes, socialist production relations and their center, public property, are a powerful accelerator of progress but under one indispensable condition: that they are constantly being improved.

The question of the forms of economic realization of public property has an ideological aspect as well. It is no secret that the difficulties our country is encountering, as it were, through a magnifying glass are being considered in the West. Here they are drawing a conclusion about the "failure of public property." The absurdity of such judgments becomes obvious when analyzing property in all the wealth of its content and external forms of manifestation. Public property as a sign of socialism cannot become the reason for negative phenomena in the economy. I repeat, they are manifested when and where the concrete forms of its realization do not correspond to the very nature of property and the changing conditions of economic life. It is necessary to restore this correspondence.

[Question] Leonid Ivanovich, you have discussed in fairly great detail what is required of the forms of realization of public property, but so far you have not named them.

[Answer] The question of these forms is a relatively new one for science and so far it has not been sufficiently developed. With claiming to give an exhaustive answer, one can say that property is realized, in the first place, in the movement of the social product and its various parts, and, in the second place, and this is the main thing, in the concrete forms of management such as the organization of cost accounting [khozraschet], wages, the system of prices and taxes, the distribution of the net output and profit, and, in the third place, in the incomes of the society, labor collectives and individual workers. The movement of property is always mediated by economic interests. One of the most important positions is thus occupied by distribution relations.

[Question] Our distribution policy is in need of improvement. It should provide more favorable conditions for rapid improvement of national well-being and strengthening of the fundamental principle of socialism: from each according to his abilities and to each according to his labor. This is a large problem which deserves a separate, fundamental discussion. We should like to hear from you know about economic thinking: can it distort social relations, including distribution relations?

[Answer] It would seem that the thinking is secondary. But it always has a sufficiently large amount of independence. But under conditions of socialism its role increases sharply since a plant economy is an economy that is deliberately controlled. It is no accident that in the political report of the Central Committee it was emphasized that work for improving the economic mechanism must begin with restructuring of the existing stereotypes of thinking. Party documents have earmarked the main requirements on modern economic thinking—a scientific nature, realism, orientation toward intensive, qualitative factors of growth, and a comprehensive approach toward solving economic, social and scientific and technical problems.

In my opinion, it is precisely the inertia of economic thinking that causes many of our economic problems. Judge for yourself. The basic economic law of socialism defines the goal and meaning of the development of production in its general direction toward the good of man. But in daily concerns the means is sometimes unwittingly taken for the end goal. And then the orientation points for production are not the concrete needs of people, but the results of the report year which must be surpassed. It is very tempting to hide from the needs of the people, behind the "needs of production" when it is more complicated to correlate one's daily decisions and actions with the final result (the satisfaction of needs).

The outdated psychological idea of production as a goal in itself explains the force of inertia which urges us to increase the volumes of output even under the new conditions which dictate quite different tasks to production. Frequently we no longer need "more." We need "better" and the those expenditures." Orientation toward growth output and volume indicators have been condemned, but in practice we cannot finally make up our minds to abandon them.

Under the conditions of the existing organizational structure of production another harmful type of thinking is also inevitable: when production interests are automatically equated with national economic interests. This approach was condemned in the political report as one of the most important directions for economic realization of public property it gave, providing for unconditional priority of nationwide interests over the interests of branches and regions and the priority of the whole over any local formations.

What does practice show us? Let us take, for example, ferrous metallurgy. Its work is evaluated according to traditional indicators: growth rates, product output in value terms, and so forth. To the output of the final product, say, rolled metal, they add the entire internal circulation (intermediate product). As a result it turns out that the increase in

internal circulation turns out to be almost an indicator of the effectiveness of the work of the branch and gives the right to incentives.

But yet this is wrong. It would be expedient to evaluate the work of the branch according to deliveries of products to associated branches and the satisfaction of the orders of the consumers. That is, it is necessary to take into account not all of the iron, for instance, but only that small part of its smelting which goes to the consumers of related branches. Nobody should care about your internal circulation (the quantity of iron or steel that is smelted). These are your own concerns. More or less—you decided for yourself. You are given limits on material expenditures, capital investments and other economic limitations. The activity is evaluated according to the final result. If you want your branch to develop dynamically, receive public recognition and have sufficient material and social benefits? There is only one path—work for the common interest.

Let us turn to the need for additional capital investments. It would be good to take advantage of the system of competitive allotment of resources. They are obtained by those branches which guarantee a large national economic effect. But if they fail to meet their commitments they must pay with their own resources. Then they immediately lose the desire to "grab for more" without sufficient basis for this. It is necessary to adhere strictly to the principle: you take a certain sum—you are obligated to return it with interest within the established time period.

Another example of the outdated type of thinking is when high earnings of a particular category of workers are regarded as something bad. There is no reason for this. After all, high earnings are the reverse side of effective labor. The purpose of many modern experiments is to establish a direct link between the results of labor activity and the measure of incentive. One should not simplify this measure. It means not only normal wages, but also social benefits, the authority of honorable labor, the possibility of a business career, a person's place in society and so forth.

[Question] Do you think that there should be no limitation on incentives, including earnings?

[Answer] In my opinion, there should not be. But when regulating the final incomes it would be good to apply the system of progressive taxation more extensively. I repeat, ideally it should be thus: the society allots the labor collective certain resources and the results depend on it itself. But the collective should be confident that the better it conducts itself work, the more it will be able to receive. This connection still needs to be properly arranged.

[Question] Do you wish to say that we need effective economic levers that motivate workers to be interested in increasing public wealth?

[Answer] Of course they are necessary. So far the collective and individual representatives of it, as a rule, are not responsible for the results of the work of the enterprise as a whole. This is an administrative function. The following ideas are fairly typical: "A worker who does not leave his machine

tool for an entire shift is not in a condition to have a real effect on the results of the work of the collective as a whole" or "It is incorrect to reduce the earnings of the worker because of the fact that the enterprise has failed to fulfill the plan, delivered poor-quality products or fulfilled a contractual commitment late if the worker has done everything he can in his position." In my opinion, these are erroneous ideas. As a result, the worker enters our consciousness as a day worker, a time worker, and not a master of production. The old type of thinking is manifested in ideas like this.

You have to activate the sense of being a master that is inherent in each individual. But it would be naive to assume that this can be done at the level of verbal persuasions and appeals. The attitude toward property is formed by concrete conditions in which the worker is placed, and the real possibilities of his influencing the administration and organization of production and the distribution and utilization of the results of labor. Therefore it will be necessary to further strengthen socialist self-management. This was clearly pointed out in the political report of the Central Committee. We do not associate, as before, the establishment of self-management only with communism, but we regard it as a constituent element of the socialist system.

I repeat that the idea "man in our society is the master of the country" should have an economic basis. Yes, Soviet people elect their own deputies and government...but it is impossible to be the master of the country without being the master in the plant, the shop or the kolkhoz.

[Question] What can you suggest here?

[Answer] In particular, to give the workers complete responsibility for the results of collective labor, to encourage them for successful final results and to penalize them for failure to do what has been earmarked so that the successes and losses are reflected in the level of income of each member of the collective. Here one should not forget that strengthening responsibility is unrealistic without expanding rights. And vice versa. It is important to adhere to the principle: he who has the right to make decisions bears complete responsibility for them.

How can one picture these rights more concretely? A labor collective is given economic normatives, say, the wage fund per ruble of output, the ratio between labor productivity and wages, the increase in the incentive funds per unit of savings on material resources, and so forth. But how it disposes of the money earned in keeping with these normatives it determines for itself. In the local areas it is clearer whether this will be a one-time incentive, monthly incentive, distribution "to everyone" or incentives for the more outstanding workers. Neither the Gosplan nor the Ministry of Finance nor the State Committee for Labor and Social Problems can resolve these issues better than the labor collective.

[Question] Will it not turn out that with this kind of independence the pushiest and loudest people will get the upper hand in the distribution?

[Answer] That cannot be ruled out, but only in the initial stage. Subsequently the democratic traditions will become stronger. The progressive system of distribution will strengthen itself and will discover and cast out unhealthy elements. It is necessary to believe in the power and the wisdom of the masses.

There is now the task of changing the interrelations between the enterprise and the budget over to a normative basis. Economic normatives are a promising instrument for planned management. In them the centralized basis in management of the economy is flexibly combined with utilization of commodity and monetary relations.

[Question] Up to this point there are still some people who are convinced that commodity and monetary relations are alien to the socialist economy.

[Answer] The past 25 years of our history have completely confirmed the correctness of conclusions to the effect that commodity and monetary relations are an indispensable attribute of planned management, and they must be utilized in all ways in keeping with the new content inherent in them under socialism. In the new edition of the CPSU Program the point about commodity and monetary relations remains unchanged from the way it was in the previous edition.

Assertions that we have borrowed these relations from capitalism are wrong. They grow out of the activity of our enterprises and associations which are acting as socialist commodity producers. The possibilities of utilizing commodity and monetary relations for planned regulation of the national economy and the organization of an effective distribution possibility are far from fully realized. It is simply impossible, for example, to realize public property without financial levers.

It was noted at the 27th Party Congress that recently there has been a weakening of the financial and credit influence on the economy. There has been extensive development of the improper practice of redistribution of income whereby losses of backward enterprises, ministries and regions are covered by those that are operating profitably. This impairs cost accounting, generates dependency, and orients people toward endless demands for assistance from the center. It will be necessary to radically change the content and methods of the work of finance and credit agencies, to eliminate trivial regulation on their part, and to strengthen monetary circulation and cost accounting.

There is an urgent question of improving the practice of collecting the turnover tax. Today it is collected when the products are sold for wholesale. As soon as the product is delivered to the wholesale trade base, the turnover tax is deducted into the budget. And it is thought that this is "live money" which can be spent for various social purposes.

[Question] There is money, but the goods are frequently not sold because of their poor quality....

[Answer] This means that the money does not find its way to the Gosbank cash registers either. This is one of the sources of the unbalancing of the monetary incomes of the population and their real commodity coverage.

[Question] How does one change the policy for collecting the turnover tax?

[Answer] I think that it should be collected in the stage of the final sale of the product to the population. Then the most powerful financial mechanism, headed by the Ministry of Finance, will exert pressure to make sure that the enterprises produce precisely the goods for which there is a demand among the population.

[Question] Leonid Ivanovich, what do you have to say about flexibility of prices?

[Answer] This must undoubtedly be increased. Prices must motivate people to look for technical motivations and develop and utilize principally new technical equipment that corresponds to the highest world standards. This pertains also to prices for consumer goods. The first steps have already been taken here. Contract prices for new goods, seasonal sales and so forth have already proved themselves.

When regulating prices it is important not to forget about the possible social consequences. The population with stable incomes should not suffer from changes in these. On the other hand, today many people are ready to pay a higher price (their incomes allow this) for especially fashionable, high-quality goods. It is necessary for this difference in the price to go to the state and not to a speculator.

[Question] In our society, where the principle of remuneration according to labor has been proclaimed, where do you think the possibility of unearned income comes from?

[Answer] My viewpoint on this problem is perhaps somewhat straightforward. I am convinced that such phenomena will be inevitable as long as there is a difference between the sum of monetary income and the commodities to cover it, including paid services. No administrative measures or traps for scoundrels will fully eliminate this. This does not mean that administrative measures are not necessary. An entire system was envisioned by the decree of the CPSU Central Committee, "On Measures for Stepping Up the Battle Against Unearned Incomes." But I am speaking about the economic basis for such phenomena. Here one cannot stop at instilling in people the correct convictions or fighting against materialism. The only solution is to solve the problem at its bases. It is necessary to have complete balance of the economy and, on the basis of this, dynamic restructuring of production in keeping with the needs of the population.

This is a quite realistic prerequisite. Private ownership of the means of production gives rise to a lack of balance, overproduction of products, crises and so forth. In a socialist society, where there is only one master, the appearance of disproportions (excluding extreme conditions, say, war) stand in contradiction to the very nature of public ownership. But if they do appear,

they are the result of "arbitrary," unscientific actions, a completely unjustified desire to skip across the predictable stages. One can hardly consider it justified to create new jobs when there is a shortage of labor force or, as is the case in the recent past, to force the growth of monetary incomes of the population when they fail to fulfill planned assignments for labor productivity.

With the modern scale of the output of consumer goods and the diversity of the assortment, the imbalance of the economy is felt much more keenly than it was 15 years ago. Indeed, at that time, meat was sold freely (with an annual per capita consumption of 40 kilograms of it). The per capita consumption of this product is now about 60 kilograms but there is no free state sale of it (except in certain large cities).

The imbalance gives rise to shortages, speculation and the possibility of having unearned incomes. As long as I live I shall never forget a case I encountered when working at the Moscow Institute of the National Economy imeni G. V. Plekhanov. They were trying a group of students for speculation in ball point pens. At that time it was difficult to acquire such a pen, but now this seems comical. For a long time there has been no shortage of watches and the waiting lines for refrigerators and television sets have been forgotten.

[Question] The kinds of items that are in short supply change, but the shortage itself will remain, will it not?

[Answer] That question is asked frequently. It would seem that the question itself is a typical example of shifting to the future phenomena which are typical of the past; it is a kind of stereotypical thinking. Shortage is not a norm of the socialist economy. It can and should be completely eliminated through goal-directed measures that are called upon to provide for a correspondence between supply and demand, monetary incomes of the population and commodities to cover them. One must open up new channels for extensive demand, stimulate the construction of cooperative and individual housing and garden and dacha buildings, and expand and improve the sphere of paid services, including tourism.

[Question] The possibilities of cooperative ownership are far from exhausted with better satisfaction of the needs of people and socialist production. What reserves have not been utilized here?

[Answer] Cooperative property can be revealed most fully in the agrarian sector of the economy, on the kolkhozes. Various interkolkhoz associations for fattening livestock and construction are promising. This is not simply kolkhoz ownership, but a higher level of cooperative ownership.

Consumer societies have rich possibilities in the organization of a system of procurements, productions for processing fruits and vegetables, that is, everything that is called the gifts of nature. This will make it possible to provide employment for the rural population between seasons. In such organizations it is possible to establish part-time work that is convenient for women and pensioners.

Attention should be given to proposals to create within the system of consumer societies small productions of an industrial type for producing gardening equipment and household items. Cooperation has great prospects in the sphere of service for the population—sewing of clothing and footwear, services for repairing apartments, the creation of small unique family cafes, and so forth.

[Question] Leonid Ivanovich, you have touched on many questions of economic science and practice, discussed state and cooperative property, touched on modern problems and addressed historical lessons of the past. What is the main conclusion that follows from all these considerations?

[Answer] Improvement of the forms of economic realization of property requires a fairly serious restructuring of the economic mechanism. It is impossible to do without this. Only then will it be possible to achieve a flexible and dynamic correspondence between production relations and the need for productive forces.

By solving this problem, we opened up the path to radical acceleration of scientific and technical progress and increased effectiveness of production. And this is the main condition for achieving those goals of socioeconomic development which were earmarked by the 27th Party Congress.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

SOCIAL PROCESSES IN MANAGEMENT ANALYZED

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 16-34

[Article by R. V. Ryvkina, doctor of economic sciences, Institute of Economics and Organization of Industrial Production of the Siberian Branch of the USSR Academy of Sciences (Novosibirsk): "Sociology and Control of Social Processes"]

[Text] The Object of Control—Social Mechanisms

In the course earmarked by the CPSU Central Committee toward acceleration of the country's socioeconomic development, there is one important aspect: it will be necessary to provide for control of social development so that the remaining unsolved social problems and also the new problems that arise will be resolved more quickly so that the social processes taking place in the society will "work" for the satisfaction of public needs.

Providing for this kind of social control is not a simple matter. First of all it is necessary to have a reliable picture of all of the social processes taking place in the country. To do this it is necessary to bring social control and science even closer together and there must be a well-arranged service for social information (including one that functions within the control agencies). Moreover, as was noted in the political report of the CPSU Central Committee to the 27th Party Congress, "the only scientific directions that are viable are those that come from practice and return to it enriched with profound generalizations and practical recommendations."

Improvement of social control today is impeded by the fact that the rate of renewal of the modern society has increased sharply. We are constantly aware of its dynamic nature. For instance, changes in the way of life which previously took decades now take place literally before our eyes.

But the rate is a quantitative indicator. Something else is more important. Before our eyes we see the generation and mass spreading of many new kinds of social processes which even 10-15 years ago were so indistinct that they were not even noticed. We have become witnesses of rapid development of collective forms of organization and labor, new forms of organization of domestic service, the formation of orchard and garden zones around cities, mass

dissemination of student labor detachments, the development of youth housing complexes, new forms of fighting against drunkenness, new methods of organizing leisure, the spreading of the service for familiarization, and so forth. Side by side with traditional forms, these new forms of social life are changing the way of life of many groups of the population and their social structure. The so-called "work stoppage" has become fairly widespread. The thief has become an odious figure. Do-nothings—people who live on unearned incomes—have proliferated.

As we can see, social changes are taking place in various directions: some correspond to the development of the social potential of socialist social relations, while others, on the contrary, foster undesirable consequences. Therefore we need a flexible strategy for control which is directed toward supporting certain processes and retarding others, checking on the effect of variants of socioeconomic development. Thus before our eyes we see the change in the "trajectory" of consumption of alcoholic beverages: the society is managing to "hold in check" this unfavorable social phenomenon and reduce its negative consequences. The scope of private subsidiary farms has expanded: today they produce more than one-fourth of the agricultural products in the country. As one can see, control of social processes is producing appreciable results.

But how does this control take place? On the one hand, it is exercised through central and local party and soviet agencies and sociological and other services of the enterprises and associations. On the other hand, there are also regulators which appear in the natural historical course of events: the family, norms and interests that are specific for various social groups, numerous and diverse kinds of activity of groups of the population in the production and nonproduction spheres, and various forms of interactions and relations among these groups. In turn, the nature of the interactions and the activity of the groups depends on the position they hold in the society.

This means that the society has a fairly complexly structured system that regulates the changes taking place in it. These are social mechanisms of directly observed processes: labor turnover, migration of the population, the dynamics of the standard of living, the level of education and so forth, which are evaluated by us as favorable or unfavorable for the country's development. It is precisely these social mechanisms which regulate the changes taking place in the society that should be the object of social control. Just as the advancement of the economy is linked to the improvement of the economic mechanism, the "optimization" of social processes require improvement of the mechanisms for social development. For in many cases direct influence on social processes is impossible and it is possible to control them only indirectly: through influencing their social regulators.

Hence the essence of social control: it consists in constant improvement of social mechanisms so as to normalize the corresponding social processes by overcoming the disfunctions that arise in them.

In a developing society social mechanisms change rapidly. Moreover, the "independent," behavioral aspect of them changes considerably more rapidly than do state control of them and methods of economic and legal regulation.

In many cases the latter lag behind the development of the forms of the vital activity of people, which are more dynamic—stereotypes of behavior in the sphere of labor, distribution relations, recreation, communication, and culture. This gives rise to certain social contradictions which retard the rates of the country's socioeconomic development.

A reliable path to prompt resolution of this kind of contradiction is more active inclusion of science in the analysis of the functioning and improvement of the social mechanisms that regulate social processes observed in the spheres of production, distribution relations, education, public health and culture. This could essentially improve their functioning and normalize the corresponding social processes.

To do this science itself must also become considerably more dynamic and not follow behind society but move ahead of it, work in the key areas of the country's socioeconomic development, and work out problems whose solutions most strongly influences the achievement of the goals that have been set.

If one is to speak of such a science as sociology, it has many "blank spots"—questions (including many key ones) which it cannot answer yet. In the report of M. S. Gorbachev at the 27th CPSU Congress he said: "We cannot escape the fact that our philosophical and economic front, and our social science as a whole, is in a condition, I would say, of a certain remoteness from the demands of life." This pertains also to sociology. I shall give a couple of examples.

The Utilization of the Labor Potential: Tendencies and the Mechanism of Regulation

We speak and write a great deal about the growing role of the human factor in production. But which processes are taking place in the sphere of its utilization? As education and skills increase and the level of material well-being of the workers rises, is there an increase in their work performance? Do they return to the society those immense expenditures which are made for improving the conditions of their labor and life?

On the one hand, there are a considerable number of complaints against the human factor from the system of control. Negative tendencies are noted in the sphere of its utilization—inefficiency, irresponsibility, low quality of labor and products, theft and write-ups. But no adequate analysis was done of these tendencies or the factors that cause them. Concrete sociological research required for this was not conducted. Theoretical ideas were not developed concerning the social mechanism that regulates the changes taking place here. It is no accident that in the recent past an excessive emphasis has been placed on administrative measures for regulating labor behavior, which has been poorly reinforced through improvement of economic and social regulators. For example, when introducing the collective contract people frequently ignore the personal incentives for labor activity and do not adequately take into account the social mechanism that regulates labor behavior.

Additionally, the party today links the solution to many production problems to the strengthening of the performance of all categories of workers. At the April (1985) Plenum of the CPSU Central Committee it was noted that "a relatively high performance level can be obtained if one puts to work organizational-economic and social reserves, and above all activates the human factor and reaches a point where everyone works at his job conscientiously and with maximum performance."

And so the problem of the inadequate performance of personnel in society exists and there is a social order to resolve it, but so far we do not have the required theoretical development or large-scale concrete research.

Taking this into account, within the framework of a special research project² we attempted to solve certain theoretical problems and verify their solution using data from concrete research concerning the realization of the labor potential of the basic groups of workers at agricultural enterprises. We studied their managers, head and rank-and-file specialists, middle-level managers, workers and kolkhoz workers.

First of all we attempted to respond to the idea that the development of production actually depends on man and why his role is so significant. In the first place, there are a multitude of problems whose solutions really do seem to depend on the behavior of people. If one is to speak about the rank-and-file workers, this includes improvement of the quality of labor, reduction of losses and thefts, improvement of the operation of technical equipment, and improvement of technological discipline. If one is to speak about management personnel, this includes the introduction into production of the achievements of science, acceleration of the rates of restructuring of control, improvement of planning and so forth. In the second place, it is not only highly productive and high-quality labor that is required of the worker today. He must also be able to overcome shortcomings in the system of control and the economic mechanism, to utilize informal channels for acquiring means of labor that are in short supply and to arrange additional economic ties. In other words, a considerable amount of economic enterprisingness is needed.

Hopes of activating the human factor are linked to the fact that during preceding five-year plans we managed to sharply raise the educational and skill level of personnel of all categories. For example, if one is to speak about such a sphere of the national economy as the agroindustrial complex, in Altay Kray 74 percent of the machine operators are of Class I and II, and 46 percent of the middle-level managers of kolkhozes and sovkhoses have higher and secondary specialized education. The majority of head specialists and managers of farms are people with higher educations. While previously various omissions in economic activity could be "written off" to inadequate educational preparation, now one can no longer speak of this. Certain positive changes have been achieved in wages, normalization of the labor load and the level of mechanization of the work.

Thus although more is required of man than before, there are also objective prerequisites that enable him to work better.

And still the accumulated social and labor potential of many categories of workers is underutilized. There are certain channels through which this "leakage" takes place. One of them is the underfulfillment or poor-quality fulfillment of commitments in the job. Various groups of workers allow this in various ways. For example, if one were to take the head specialists of the farms, only about half of them engage in their basic work, the introduction of scientific achievements into production. Another channel of "leakage" is the increase in expenditures on overcoming interference costs by shortcomings in the economic mechanism and the system of control—coordination, obtaining permission, and finding ways around solving various problems.

Having an idea about the forms of labor realization of the workers (productivity and quality of labor, economy of resources, participation in streamlining of production and so forth) and also knowing the possible channels of "leakage" of the labor potential, one can measure the completeness of its realization. By registering these indicators in their dynamics, it is possible to reflect the corresponding process and to understand its direction.

So far we have been able to reflect only the static "cross-section" of the process. It turned out that the reserves for utilizing labor potential of agricultural personnel are exceptionally great. This was reinforced by estimates provided by the workers themselves. We asked various groups of them this question: "Could you work better than now, and if so under what conditions?" As a rule, no more than 25 percent of those questioned gave unequivocal negative answers and the rest pointed out various factors which would enable them to work better. In the most general form one can say that the main reason for the "leakage" of the labor potential is the continuation of those shortcomings in production and management relations which have been mentioned repeatedly in party documents as things which had to be eliminated. Therefore better utilization of personnel is possible only under the condition that these shortcomings are eliminated once and for all.

But in order to increase the labor performance of personnel it is also necessary to have a special system of measures and a particular strategy for controlling the human factor in production. It can be developed only on the basis of an in-depth analysis of the causes (factors) that give rise to incomplete utilization of the labor potential that are in effect at various levels of production and influence various categories of personnel. The complex of these interconnected factors forms a social mechanism for regulating labor activity and the behavior of workers as well as the realization of their labor potential.

The Economic Mechanism and the Personality of the Worker

During the course of research on the attitude toward labor which was conducted by Soviet sociologists they revealed many essential dependencies. It was demonstrated that this attitude depends on the level of education and skills, wages, and conditions and organization of labor. It would seem that the paths to improving the regulators of the attitude toward labor are clear. But nonetheless one is constantly encountering situations that give one pause. There is dissatisfaction with work among low- and high-paid workers. There is inadequate performance both by people who are inadequately educated and by

workers with a higher education: young and old; experienced specialists and newcomers; and managers of both backward and leading enterprises. The constant complaint of managers of businesses, "I see what needs to be done but I cannot do it." Why? "Instructions...."

In the country's agroindustrial complex they have begun a serious restructuring which is directed toward removing administrative interference to labor activity of the managers and specialists of enterprises and creating the necessary conditions for the development of socialist enterprisingness. The abolition of certain instructions which limit the activity of managers does not exhaust the problem. A more complex task is to assimilate the new principles. It is necessary to transform new principles of management into customary stereotypes of behavior and to overcome old stereotypes and customs which have become features of social types of managers that are typical for stages of the development of the economy through which we have passed. The demands on the system of management and personnel are different but the system itself and the personnel remain basically the same. For the system of management is not only an organizational system, but a developed style. It takes time to change it, not to mention to form new social types.

The performance of workers in production depends on the dual nature of the regulators: the forces of stimuli that are called upon to strengthen activity and the forces of interference which impede the solution to production problems. If one looks at the existing economic mechanism not from the position of its influence on the development of financial technical-technological, information and other ties among managing subjects, but from the position of the personality of the worker, one becomes convinced that the impediments to labor activity generated by this mechanism are still great. Therefore the material and other incentives that are introduced frequently do not produce the expected results and do not work out. For example, if a veterinarian does not have the necessary medicines or he does not have the right to conduct preventive measures as he thinks is correct, with any amount of wages his work will be poor. It is no accident that the satisfaction of the main specialists with their work is low even though their earnings are 280-300 rubles a month. Analogously, if the manager of a farm cannot provide him with the required technical equipment or construction materials and cannot create the necessary social and domestic conditions for the workers, his satisfaction decreases even when there is fairly good material incentives for his labor. Thus among the farm managers we questioned in Novosibirsk Oblast, only 18 percent were completely satisfied with their work, 22 percent were satisfied with various reservations, and 35 percent were dissatisfied (25 percent did not give an answer). Correlated to this are the indicators of the potential turnover of managers: 50 percent of the managers would like to leave their jobs, including 29 percent to a lower position, 9 percent to a higher one, 11 percent to a less hectic one, and 9 percent to something else. Only 33 percent of those questioned would like to continue to work in their given job (17 percent did not give an answer).

And so in the complex of working conditions and in the nature of the production situation of the basic groups of workers, there are a multitude of impediments that are generated by shortcomings of the existing economic mechanism. At the level of individual enterprises and jobs, these impediments

result in a reduction of the quality of management, a shortage of means of labor, and deterioration of the sociopsychological climate—conflicts and tension in interactions. These are the impediments to normal work which are most frequently noted by the rank-and-file workers and kolkhoz workers.

As for managers of enterprises, head specialists, and managers of subdivisions, the major factor reducing their labor performance is the lack of correspondence between their duties and responsibility, on the one hand, and their economic rights, on the other. Suffice it to say that with an excessive labor load (43 percent of the managers we questioned complained of this as did 60 percent of the head specialists) only a few manage to do what they would like to in their business. Hence their dissatisfaction with their work and at the higher levels—the orientation toward replacing workers who are not coping with their jobs, frequently talented workers, and transferring them to other sections. This does not have the best effect in the corresponding collectives. Both sides suffer—both the managers and the subordinates—when the real guilty party is the system of economic and management relations in which both are working, which keeps them from realizing what in principle they can and want to do.

The situation that has been described explains the emphasis in the materials of the 27th CPSU Congress on the expansion of the independence of managers and specialists of enterprises. They clearly formulate that it is impossible to achieve the proper responsibility of personnel without granting them greater rights. Consistent expansion of rights presupposes consistent removal of those limitations on the adoption of economic decisions which were placed by existing normative documents. The removal of limitations will make it possible to reach a point where the volume of duties, responsibilities and rights of each group of worker strictly correspond to one another. Thus they will overcome the dysfunctions in the social mechanism on which the labor performance of personnel depends.

To do this it is necessary to solve a number of theoretical problems. In particular, it is necessary to figure out in precisely which directions socialist property relations should improve. "Without thinking out these changes on the theoretical plane," it said in the political report of the CPSU Central Committee to the 27th Party Congress, "we will not be able to find correct practical solutions and, consequently, we will not be able to promptly develop measures for forming a truly economical attitude toward socialist property."

The basis for the theoretical development of the social aspects of property relations are the indicators of class formulated by V. I. Lenin: the attitude toward means of production, the role in social organization, the amount and source of the share of public wealth that is received.³ According to tradition, these indicators are applied only for describing the working class and the kolkhoz peasantry and establishing the differences between them. But the fact that these differences are increasingly being surmounted and the share of the kolkhoz workers is decreasing sharply makes it necessary to concentrate attention on intraclass differences. These differences, which are based (for example, with respect to the working class) on a unified state form of property, should be established according to criteria which are a

concretization of Lenin's class indicators. This makes it necessary to make them more operational so that they can be used for revealing intraclass differentiation of workers in the national economy.

The problem was unsolved until recently. In recent years progress has been made here. Thus Ye. G. Yasin suggested utilizing a system of categories which includes relations of utilization, distribution, ownership and property.⁴ With respect to the concrete groups of workers one should speak about revealing their positions in the system of these relations, the scope and significance of the economic decisions made by them, the range of duties established for them, the volume of responsibility, and the possibilities of carrying out management functions.

These are factors with which the economic mechanism regulates the labor performance of personnel. An analysis of these is also necessary because of the changes observed in human behavior itself. The fact is that as the material well-being and culture increase there is a change in the nature of the motivation for labor activity. The value of labor begins to depend more not only on the amount of wages and other material goods, but also on the degree to which labor enables the individual to realize his potential capability, to put certain plans into effect, and to achieve high production indicators. And if the conditions for production are such that they do not allow one to achieve goals of this kind, the attitude toward labor begins to deteriorate: initiative deteriorates, the worker loses interest in his work, and he becomes indifferent and passive.

On the other hand, it is today that immense efforts are required to improve the economic mechanism of our economy and, as was noted at the 27th CPSU Congress, it is most important for people to have a "feeling of being a master," the desire to take on responsibility and not be afraid of bold solutions, to develop and implement them. One of the negative social aspects of the narrow departmental approach to management is the fact that it is precisely these qualities of workers that are now in shortest supply. Far from all managers and specialists strive to take on responsibility for independent solutions to complex economic problems. It is no accident that in recent years the CPSU Central Committee has emphasized the need for a psychological restructuring of personnel as a most important prerequisite for acceleration of the country's socioeconomic development.

All this should be taken into account when developing the social mechanism that regulates the labor performance of personnel. It should help, in the first place, to determine the position of the basic groups of workers in the system of production and management relations, which they actually occupy; in the second place, it should reveal the changes which must take place in their environment in order for their performance to correspond to the new states in the development of the Soviet economy. Until such a mechanism is developed, conducting concrete research on this extremely crucial problem is seriously impeded. And without concrete research it is difficult to develop the practical proposals expected from science.

Thinking About Tasks and Difficulties of Sociological Science

In the Political Report of the CPSU Central Committee to the 27th Party Congress the question of the tasks of social sciences was posed extremely clearly: "Time has raised the question of the extensive entry of social science into the concrete needs of practice and requires that social scientists react sensitively to the changes taking place in life, keep new phenomena in their field of vision, and draw conclusions that are capable of orienting practice correctly."

But the practical return from science depends on its own readiness. Certain of these factors of readiness—information support, computers, methods of processing and analyzing data—are discussed fairly frequently. But what is not sufficiently taken into account is that a reliable theory is necessary for a significant return: a concrete picture based on Marxist methodology of the laws in effect in the modern stage of the development of the socialist society in the USSR which reflects this society in all of its complexity. Moreover, there is the opinion that theory is something extremely remote from real life that is not strongly related to solving practical problems. Not to mention that this idea does not correspond to the views of the classics of Marxism-Leninism or the decisions of the CPSU Congresses, it creates great difficulties in developing the science and practice of management. After all, it is known that a truly scientific theory is practical. In our day, the practicality of a theory is its constructive contribution to solving the crucial problems of improving social relations under socialism and accelerating the country's socioeconomic development. The task consists in making this contribution more significant.

Indeed, many of the processes typical of the modern stage of the development of socialism are still unstudied. This was discussed at the June (1983) Plenum of the CPSU Central Committee where it was noted that we do not yet know the society in which we live. Thus it was established that as compared to the dynamic society science was not yet dynamic enough. For many years in party documents pertaining to social sciences, including sociology, we encounter such evaluations as "insignificant subject matter," "descriptiveness" and "dogmatism."⁵ They point out the fact that the problems being developed are not on a large enough scale, the analysis that was conducted was not deep enough, and the style of scientific thinking frequently was determined by theoretical formulas that reflect the past in social development.

One of the most serious impediments to dynamic development of scientific theories is the continuing adherence to dogmas. In the "Philosophical Encyclopedic Dictionary" published in 1983, we read: "Dogma is doctrine or individual points of it which are taken for truth without proof, experimental substantiation or practical verification, and only on the basis of religious belief or blind subordination to authority.... In science outdated ideas supported and defended by conservative scholars frequently assume the form of dogmas." At the 27th CPSU Congress it was noted that "scholasticism, traditionalism and dogmatism have always been paths to actual increase of knowledge. They lead to stagnation of thinking, they place an impenetrable wall between science and life, and they impede its development."

In spite of the general agreement that dogmatism is harmful, in real life we are frequently held captive of traditional stereotypes of thinking and we continue to follow them blindly. Sociology is no exception: it has many formulas which, although they have not been confirmed by facts, are considered irreproachable, obvious and indisputable. Such are the ideas that labor under the conditions of socialism has already been transformed into a vital necessity, that a rise in the level of education guarantees greater labor activity on the part of the workers, that raising wages undoubtedly strengthens performance and so forth. These ideas are not dogmas because they are incorrect. Within certain limits each of them is true. They are dogmas to the extent that they are absolutized, that is, they are interpreted as true regardless of anything. What happens? When they encounter reality it turns out that the labor for many groups of workers is still nothing more than a means of making a living, that an increase in education is not always accompanied by an increase in the contribution to production, and so forth.

Dogmas are not inoffensive. They do not simply take the place of scientifically substantiated truth. They fight against ideas that threaten to overthrow them. These two features of dogmas—masquerading as scientific truths and hostility to them—make them incompatible with the creative role of science in the development of social life. It is no accident that in recent years a number of scientists have written in the party press suggesting that we step up the fight against dogmatism in social sciences. Thus L. I. Abalkin points out the need "to overcome the divergence revealed by life between certain theoretical formulas that have taken form in the recent past, and the real course of social development."⁶ This divergence is one of the factors that reduces the contribution of sociology (as well as other social sciences) to practice.

Let us take as an example the nature of interests under the condition of socialism. For many years in our sociopolitical and training literature the concept of objectiveness of interests has been used. Thus in the "Philosophical Dictionary" of 1968 we read: "Under socialism the interests of the society objectively become common interests for all of its members." And further: "While it is the objective interest of each member of a given community, it is not always recognized by them as such."⁷ As we can see, interest is interpreted here as something that is above individuals, as some kind of abstraction. Yet the fact that the real interests of various groups can diverge and that these interests depend on the value orientations of the people, on the goals and motives of their behavior—none of this is taken into account.

In subsequent years this viewpoint began to fall apart. But in a monograph of 1984 we read the following: "What are the most important indicators of the system of economic interests under socialism? The main one is their unity. A unity of economic interests leads to a unity of actions of participants in socialist production relations, which gives rise to cooperation and mutual assistance of participants in these given relations and true collectivism."⁸

The fact that unity exists as a fundamental and major aspect of socialism has long been established. But it is a fact which is not accounted for

sufficiently for effective control. If one takes into account only unity, then control of the human factor in production is an extremely simple task: all one need do is inform the workers precisely what their interests are (which they themselves do not always recognize) and their actions will immediately become the kind that are desirable for the society. But in fact this does not take place. Something else takes place: theoretically unsubstantiated points of science disorient the practice of control and create the illusion that it is easy to control the human factor in production.

The price of the underdevelopment of theoretical issues of socialism, not to mention the dissemination of incorrect theoretical propositions, is extremely great. Suffice it to recall a couple of examples from the recent past. The policy conducted in the 1950's and 1960's toward curtailing private subsidiary farms of the population was directly related to the assertion that these farms stand in contradiction to the principles of socialism and as it develops they must die out. The inadequate attention to improving forms of material incentives for workers in public production for a number of five-year plans was reinforced by the notion at the time concerning the weakening of the role of material incentives and material interest in labor under socialism. No small amount of harm was brought to practice by the concept existing in social sciences of "total urbanization" of rural areas, which ignore the need to retain its specific features related to special production and social functions of the rural areas. It is precisely this concept that lay at the basis of the practice of eliminating small villages under the motto of their "lack of a promising future."

From these examples one can see that the distance between the theoretical points and the practice of management is not so great. Moreover, the majority of the mistakes of the practice of management result from various dogmas that were accepted during the corresponding period of time and "blessed" practice in its corresponding steps.

In this connection the question of the responsibility of science becomes crucial. A good deal has been written about this: about responsibility for the utilization of discoveries in the areas of physics, chemistry, medicine... One hears less about responsibilities of social sciences for the results that are received: tendencies and laws that are revealed, recommendations that are given.

I am thinking about the material published in the notes of N. Maksimova, "Brigades at the Crossroads." When describing the deep processes which cannot be seen with the naked eye and therefore are difficult to write about, the author says about sociologists: "Here is who is supposed to see the deep contradictions and sometimes halt the administration and the organizers."⁹ but in order to halt them it is necessary to have an in-depth and objective analysis of the situation which does not involve fetishization of social practice. And the changeover to the collective contract is being carried out in order to increase labor productivity and increase the return from the human factor in production. But the advancement of this goal and the introduction of precisely this social form of its achievement does not mean that this form is the only instrument, means or variant of development which can lead to the goal that has been set. This one or some other can be revealed, in the first

place, by a theoretical analysis of the principles of the brigade contract and, in the second place, by an in-depth analysis of the results of its introduction. A theoretical analysis should be carried out before mass introduction of the brigade form of labor organization. It was necessary in order to foresee precisely which social and economic processes could be generated and which consequences could result. There was no such analysis "at the outset." "So far there is no integrated concept of the development of brigades, but there is already a stereotype of evaluations which regard collectives primarily as a means of increasing labor productivity.¹⁰ Without conducting a preliminary theoretical analysis science accepts the goal evaluations developed in the practice of management for objective reality. Subsequently the task is even simpler: to illustrate the accepted goal estimates with data that have been gathered. But doubts are rarely expressed, not to mention substantiated, by the practice of management concerning how optimal the variant of development suggested "from above" may be. It is no accident that disputes concerning questions pertaining to various paths of development and various methods of achieving goals have not been heard in sociology. And yet the truth is generated in dispute, in the confrontation of various viewpoints, their analysis, their comparison and the selection of the most correct one. Can one really be surprised at the inadequate return from science in a situation when such a powerful mean for it to develop particular solutions is practically not utilized?

V. I. Lenin, describing Marxist theory, gave as a major feature of it the revolutionary spirit and its critical nature. Sociological theory is a most important instrument for critical and at the same time constructive analysis of the effectiveness of steps taken during the course of improving social relations. The deeper the analysis the more objectively it will reflect the real tendencies and processes and the greater the degree to which one can hope that the goals we set will be successfully reached. Failure on the part of science to fulfill its role in constructive criticism of activity is tantamount to weakening its participation in the solution to crucial political and economic problems.

Sociology and the Practice of Management: Supply and Demand

The productivity of science in its work in the key sections of social life and its real contribution to improving the basic social mechanisms of our society depend not only on the readiness of science itself to develop new paths, which was discussed above, but also on whether or not the society has a clearly expressed (and, the main thing, reinforced with real actions) need to know what is taking place there and in which direction it is changing. The bearers of this need are first and foremost the subjects of control—party, state and economic agencies that are responsible for developing the economic and social policy and adopting and fulfilling the basic economic decisions. It is understandable that the more crucial the social problem that must be solved, the deeper the "horizon" of social relations which have to be involved, the more complicated the regulating mechanism, the more complicated the tasks that are facing science. And this makes it all the more necessary for the subjects of control to be more interested in making sure that their tasks are carried out fully.

For in the sphere of interaction between social sciences and the practice of management there is a common law: supply generates demand.

But the demand for the results of sociological research on the part of territorial and branch management is inadequate today. It is no accident that at the 27th CPSU Congress it was noted that "our planning and economic agencies, as well as other departments do not show the proper interest in implementing the efficiency proposals of social scientists." This is directly reflected in the return from science. When the demand is inadequate the incentive to conduct research and analyze the most crucial social problems decreases. The quality also deteriorates for the researcher who is working without a direct link with science has a right to decide independently the level to which he will take his analysis, precisely which factors he will touch upon and so forth. No persistent need arises to dig down to the ultimate causes of various negative tendencies. Naturally, the depth of the analysis can be less in such a situation.

The general tendency is this: weak contact with practice complicates the organization of research, makes it difficult to establish scientific problems, and has a negative effect on the depth of the results. Suffice it to say that sociologists frequently have to spend a good deal of extra time in order to pose the problem precisely and formulate the task for research. Regular contact with practical workers would contribute to posing these tasks more precisely and in shorter periods of time.

As we can see, science must not only give to practice, but also taken from it. In order to facilitate the technology of scientific labor and increase its effectiveness, contact between science and the practice of management should become the norm for their work. Today this norm has not yet been formulated. This is manifested in the course of experiments in industry, agriculture and the nonproduction sphere: new organizational forms are frequently introduced without the proper sociological expert evaluation and without analysis of the opinions of enterprise managers and specialists themselves. In other words, without the required social substantiation. And in some places this is done purely administratively. Sociologists are frequently enlisted to develop drafts of new and more progressive forms of economic and administrative interactions. This does not motivate science to develop the corresponding concepts, methodology or methods for social planning or the introduction of socioeconomic innovations into practice.

But still the integration of science and practice is gradually becoming stronger. Even in academic institutes there are more and more collectives of sociologists who are working in close interaction with management agencies. This tendency will continue to grow in the future. There will be a bilateral process: increased sociological literacy on the part of management personnel and greater practical orientation on the part of scientific personnel.

The course followed by the CPSU Central Committee toward acceleration of socioeconomic development, which was accompanied by a psychological adjustment of personnel, creates favorable conditions for the work of sociologists. Under the conditions of the deep transformations it is easier to pose and solve problems pertaining to the basic social mechanisms of our society. A

possibility is created for expanding the problematics of science, going beyond the framework of traditional problems, and studying new phenomena and processes. It is necessary to increase demand not only for practical recommendations, but also for theoretical, fundamental developments. This is a guarantee of increasing the contribution of sociology to the development of the socialist society.

FOOTNOTES

1. Zaslavskaya, T. I., "Economics Through the Prism of Sociology," EKO, No 7, 1985.
2. Leader of the project—Academician T. I. Zaslavskaya.
3. Lenin, V. I., "Poln. Sobr. Soch." [Complete Collected Works], Vol 39, p 15.
4. Yasin, Ye. G., "Public Property, Economic Incentives and Cost Accounting," EKO, No 12, 1984.
5. See, for example, the decree of the CPSU Central Committee, "On Increasing the Role of the Institute of Economics of the USSR Academy of Sciences in Working Out the Economic Theory of Developed Socialism," PRAVDA, 24 February 1984.
6. KOMMUNIST, No 18, 1984, p 63.
7. "Filosofskiy slovar" [Philosophical Dictionary], Moscow, Politizdat, 1968, p 133.
8. Ageyev, V. M., "Ekonomicheskiye interesy i stimuly pri sotsializme" [Economic Interests and Incentives Under Socialism], Moscow, "Sovetskaya Rossiya", 1984, p 7.
9. Maksimova, N., "Brigades at the Crossroads," EKO, No 8, 1985, p 196.
10. Ibid., p 164.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/215

KIROV TIRE PLANT USES DIFFICULTIES TO ADVANTAGE

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (EKO) in Russian No 9, Sep 86 pp 35-48

[Article by F. I. Yashunskaya, doctor of economic sciences, senior scientific associate of the TsNIIENeftekhim (Moscow): "An Old-Time Outstrips the Youngsters"]

[Text] The experience of the leading enterprises is not solely experience of achievements. As the great Russian poet said, Experience is the son of difficult mistakes. Any collective, even the most successful with regard to all production indicators, must experience defeat, disenchantment and doubts, and their bitter taste is always mixed in with the taste of victory. It is necessary to study the "darker sides" of success in order to understand the basic tendencies in the development of the collective more completely and more deeply, without bypassing the contradictions.

It is from these positions that we have tried to analyze the experience of the Kirov Tire Plant, the leader in its subbranch. This enterprise entered on the path of intensification of production before many others did. And as was emphasized in the materials of the 27th CPSU Congress, in the near future all industrial production will change over to a mainly intensive path of development. Intensification is the center of interweaving economic, social, psychological and moral problems. It is necessary to study the paths of intensification that already exist in our practice in all of their complexity in order to foresee those possible difficulties and barriers which will have to be overcome by many enterprises. And from this point of view the experience of the Kirov Tire Plant is instructive. It forces us to think about the goals, means, possibilities and limits of intensification, about its interrelations with technical progress and the culture of production as well as with socialist competition.

The Kirov Tire Plant has become a unique phenomenon in its subbranch. It was constructed during the war years and although the production premises have been constructed several times, their planning is already outdated and it is impossible to house modern automated lines and large machines here. But still the old plant, with its limited capabilities with respect to a number of the most important technical and economic indicators, has outstripped other enterprises, even young giants that have the latest equipment.

In 20 years it has fulfilled and overfulfilled the plans for the output of products. During this period it has completely updated the models of tires with the Kirov trademark. In 1985 the KShZ produced 93 percent of its products with the State Emblem of Quality (for the tire industry as a whole this indicator was 56.8 percent). Kirov workers had one-seventh the average branch number of losses from defective work. The durability of their tires (or mileage, to use a professional term) is also at a high level. For example, the average amount of mileable of a Kirov 240-580R radial tire for GAZ trucks before repair is 33 percent more than for tires of the same size produced by the Barnaul Plant and the Bobruyskshina Production Association. All the truck tires produced in Kirov can be used as long as imported ones on good roads.

But now let us take a look at the position the Kirov Plant holds in the branch with respect to labor productivity. But first let us attempt to find the most objective criterion. The value indicator is used in industrial statistics. But it depends too much on the assortment of products and price setting. The proportional labor-intensiveness (1 kilogram) of a motorcycle tire is 3 times greater than that of a truck tire and the price ratio is constructed on more than this indicator. And if the assortment is broad as it is at the Kirov Tire Plant, measuring labor productivity in the plant as a whole is the same thing as measuring the average temperature of patients in a hospital. In addition to tires the Kirov Plant produces many more labor-intensive motorcycle and bicycle tires and therefore it is in a disadvantageous position as compared to enterprises that do not produce motorcycle and bicycle tires. The greatest reliability can be achieved in evaluating the labor productivity of plants with different assortments by comparing the labor-intensiveness of the manufacture of a tire of the same size. Let us take the aforementioned 240-580R tire (radial design).

Table 1

Plants	240-580R Model Tire	General Plant Labor-Intensiveness, %
Kirov	K-55A	100.0
Kirov	KI-63	100.8
Bobruyskshina Production Association	KI-63	103.4
Barnaul	KI-63	132.4

Now let us compare the labor-intensiveness of the manufacture of a tire with a diagonal design.

Table 2

Plants	240-508R Model Tire	General Plant Labor-Intensiveness, %
Kirov	M.93	100
Belotserkov	M.93	117
Moscow	M.93	130

As one can see from the tables, the labor-intensiveness of the Kirov workers is lower not only than that of the Barnaul and Moscow plants, which are not very young, but also the new Belotserkov and Bobruyskshina PO.

The Kirov Tire Plant is best of all at utilizing raw and processed materials and therefore the Soyuzshina VPO established for it the lowest normatives for the proportional expenditure of rubber in the production of certain kinds of tires. Energy resources are also utilized economically. Interesting material for thought can be obtained by comparing the proportional expenditure of electric energy at the Kirov and other tire enterprises that are the most economical in this respect and also the average for the tire industry in our country and Japan.

Table 3

Plants	Proportional Expenditure of Electric Energy, kilowatt hrs. per 1 ton of rubber	Branches	Proportional Expenditure of Electric Energy, kilowatt hrs. per 1 ton of rubber
Moscow Plant	2.86	USSR tire industry	
Dneproshina PO	2.11	(average branch	
Yaroslav Plant	1.59	indicator)	2.75
Kirov Plant	1.13	Japanese tire industry	
		(average branch	
		indicator)	1.00

The Kirov Tire Plant has the highest output-capital ratio (in rubles of commodity output per 1 ruble of value of fixed production capital): 4.13, while the average branch indicator is 1.48. Expenditures per 1 ruble of commodity output made by the Kirov workers in 1985 amounted to 79.13 kopecks while the branch average was 85.3 kopecks.

From the comparisons given above one can see that the Kirov Plant's leadership in the tire industry is of a stable nature. The Kirov workers have achieved success because they were the first in their subbranch to enter on the path of intensification of production.

Why Does the Plant Need a "Comfort Zone"?

In the 1960's many people were speaking about the need to pay attention to quality and called for all-around intensification of production. Only a few went beyond words to deeds. In the tire subbranch only the managers of the

Kirov Plant decided to make a sharp change. And, which is important, the plant was given a respite: it was decided to reduce the rates of increase in production volumes for 5 years, and the output per worker remained at the same level without increasing. This made it possible to accumulate energy, and then the Kirov worker "paid back their debt" with interest.

The plan's changeover to the path of intensification was marked by a struggle for the culture of production which was led by Galina Pavlovna Goloulina during the 14 years she held the post of head engineer, from 1960 through 1974. For a year the head engineer had to persuade the specialists that no innovation would produce a great effect if everything were not in order in production. The plant's director Vasiliy Ivanovich Komissarov, who supported her efforts, helped her a great deal in this. The culture at the Kirov Tire Plant began with attention to small things, behind which at that time nobody could see the strategy which would make leaders out of the collective. At the insistence of the head engineer the plant introduced a work uniform. It had a uniform design, but the colors varied. An artist and a fashion designer worked on it. After they received the almost elegant work clothing, the tire workers took it home and then appeared in the shop wearing something else. The head engineer ordered: Anyone who comes to work in anything but the special clothing will be removed....

It was equally difficult to teach the tire workers to maintain elementary order in their work places. And yet they reached a point where each worker, when he completed the shift, would begin to wash the floor and clean the equipment. Goloulina understood that cleanliness in the shop is important not only in and of itself, but also in order to improve the quality of the semimanufactured products and the prepared tires. In the shops they repainted the machine tools and walls in "comfortable" colors and rearranged the sections so that it would be cleaner and more spacious. They reequipped the ventilation and improved the lighting of the work positions. Attention was drawn to the noise and they tried to reduce it. Comfortable rest zones were constructed in the shops. Lawns were planted throughout the territory and they also planted lime trees, apple trees, birch trees and flowers. The workers and specialists themselves created a "comfort zone" at the enterprise—and they were so surprised at first to see innovations "not necessary for production," but people were glad to come to work on Saturdays.

At the same time under the Laboratory for Scientific Organization of Labor they organized a group for industrial aesthetics, an artist, a psychologist and a sociologist came to the plant, and scientific associates from the Moscow Institute of Labor Hygiene and Occupational Diseases began to arrive. The head engineer G. P. Goloulina and the Plant's Director V. I. Komissarov were interested in their research and helped them to deepen and concretize it. This is possibly why the scientific recommendations were of practical value and helped to improve the microclimate in the collectives and expand the "comfort zone" in all the work positions.

This policy was adopted completely only when its results became clear. Product quality improved, labor turnover became the lowest in the subbranch (moreover, during a period of 5 years almost everyone who had left here during the preceding decade came back), and discipline became stronger.

Who "Does" Intensification?

In the first stages of intensification the Kirov workers formulated their own clear-cut credo. The main support of intensification was to be the culture of production and technical progress. Intensification should be carried out by innovators and engineers who would create machines, mechanisms and devices that would help to improve product quality and increase labor productivity. Many engineering and technical services of the plant grew up and became strong: a central plant laboratory and divisions of the head designer, head mechanic and head metrologist, and a service for scientific and technical information was created. Managers of the enterprise looked for people capable of creativity—some of them were even relieved of ordinary production work and they became "professional efficiency experts." In order to create new means of mechanization and automation, they organized a laboratory for nonstandard equipment and as a part of it a design sector which was headed by the plant efficiency expert, N. G. Parfenov. Creative groups created in many divisions participated in the work for accelerating technical progress.

Constant attention was devoted to the managers of the shops. The shop chief is traditionally considered to be the most conservative figure in the plant, is opposed to innovations, and by conditions themselves is placed in a position in which the main thing for him is the fulfillment of the plan in "units." It was difficult to adjust this psychology. Indicators of the culture of production were introduced into the conditions for socialist competition. The fulfillment of the shop plan for organizational and technical measures for modernizing production was placed on a par with the fulfillment of the state plan for product output, and failure was severely punished—right down to firing. The chiefs themselves were ordered to make suggestions concerning updating and modernizing the shops—but this requires high qualifications and an interest in innovations.... There followed a process whereby these units came to be led by younger people: practical workers were placed by specialists with higher education, mainly youth.

But the erudite youth did not have enough knowledge of concrete production. Managers of the Kirov Tire Plant felt the need for close contacts with higher and secondary specialized training institutions. On their initiative, in the Kirov Technological Tekhnikum and Polytechnical Institute they opened up divisions for training tire workers, and leading specialists of the enterprise began to deliver lectures and participate in the training of engineers and technicians; and when the graduates came to the plant they were already familiar with it and the managers knew their capabilities and were able to involve them in updating production more rapidly.

Programs for training workers were revised; they tried to make it so that the workers did not automatically perform operations, but understood their meaning and knew the technology (to do this they expanded the course of theoretical lectures and utilized active forms of training as well as business games). Kirov workers, who subsequently participated in professional competitions, not only won prizes for their qualifications, but also demonstrated the deepest theoretical knowledge.

Business Trips With an Economic Effect

The experience of the Kirov tire workers proves that any collective can be made innovative. After all, at the beginning of the 1960's the enterprise's creative potential was very small. They almost did not engage in the development of their own models of tires and streamlining was developing poorly. They were waiting for the new Scientific Research Institute of the Tire Industry (NIISHP) and the veteran of the subbranch, the Yaroslav Plant, to propose something new. Therefore innovations appeared quite rarely at the Kirov Plant.

The first stage in the acceleration of technical progress at the Kirov Tire Plant began not with independent developments, but with active borrowing and the study of the experience of other enterprises.

Developing the policy of culture of production, the plant Laboratory for Scientific Organization of Labor compiled profession charts for all the work positions and singled out the especially unfavorable conditions. In the tire industry conditions are generally not easy: the level of mechanization even now does not exceed 50 percent, the workers have to lift heavy parts, and there are shops with harmful working conditions.

With concrete assignments regarding those places in the shops where it was immediately necessary to make technical improvements, the specialists from the Kirov Tire Plant traveled to related enterprises and scientific research institutes. In addition to what was assigned they "borrowed" everything else that they could introduce. The inspectors reproached the Kirov workers: You are squandering travel money. But one ruble spent on these business trips produced a great effect—30 rubles (the effect from the "imported" innovations divided by the travel expenses). During their trips to other plants they learned how to make and introduce new things. The Kirov workers immediately began a purposive search for technical information. What one calls a taste for innovations entered the plant's atmosphere.

"Home-Grown" Technical Progress

The most significant event in the history of the plant and of the entire subbranch during the past couple of decades was the assimilation of the output of tires with radial design for trucks (before this only tires with diagonal design were produced, and they did not have the reliability or quality of radials). Based on theoretical and applied developments obtained from the Scientific Research Institute of the Tire Industry, the Kirov workers were the first in the country to create a series-produced industrial radial truck tire 240-508R of the model K-37A. They were almost a decade ahead of the American tire industry, which did not begin to produce radials until the first half of the 1970's. This work was given a high rating: three workers of the NIISHP and two from the Kirov Tire Plant, the former head engineer G. P. Goloulina and the former head designer and current deputy head engineer N. S. Goloshumov, were awarded the Lenin Prize.

The first large achievement caused the manifestation of a whole chain of other innovations. Not a single other enterprise of the subbranch created as many

models of tires and automatic components or can be praised for such a number of innovations that were exhibited at exhibitions (the KShZ participated in 40 exhibitions and 95 exhibits were awarded prizes from the All-Union Exhibition of the Achievements of the USSR National Economy) and were recommended for introduction at other Plants.

If you go through the shops of the plant you see everywhere "home-grown technical progress"—as the Kirov workers themselves call their innovations. These include a whole number of instruments for quality control of the manufacture of rubber compounds, semi-manufactured products and final products (for example, the Kirov Vibrorheometer determines the quality of compounds 10 times more reliably than the old express control method that was used here before its introduction) and devices for remote control of technological operations. Kirov workers are intensifying technological processes (for example, by using zone heating they have reduced the duration of the process of vulcanization by 10-20 percent and reduced the expenditure of fuel). Many independent developments are linked to minor mechanization and improvement of working conditions. The labor of the tire batchers has been made easier—here they have introduced a direct flow line; the chamber is no longer powdered with talcum before it is placed in the casing, but a silicon emulsion is used; the air in the shop has become cleaner. When loading heavy truck tires into railroad cars they have started using packaging and have increased the capacity of loading by 10-30 percent; this work is also mechanized.

Here they have formed a system of planning, development and introduction of innovations in which divisions and shops of the plant are included consecutively, as in a chain. At the end of the summer they are already beginning to prepare for the next year. The service for new technical equipment asked them to submit their ideas about what should be created or introduced at the enterprise. Then the leading specialists make their suggestions. So there are two lists of proposed innovations: one is formed "from below" and the other—"from above." And both these lists are only "raw material" for further discussion. Now the technologists, designers, production workers, mechanics and power engineers join the company of those who provide for technological process: supply workers, builders, financial experts and planners. They scrupulously figure out which innovations are more needed and more feasible, which can be provided with materials and which materials cannot be acquired. The results of the discussion are summed up in a general plan, financial estimates are drawn up (will there be enough money to purchase machines or materials) as are production estimates (how will the creation, testing and introduction of the innovation influence the fulfillment of the production plan). The so-called "juncture" aspects are also considered: for example, will the builders service manage to do everything necessary for all the clients. This last stage of the work is carried out in the enterprise's technical council. Here they approve the annual plan for organizational and technical measures, which, as a rule, is fulfilled.

Safe Technical Equipment Rather Than Accident Prevention

The dynamic nature of modernization at the Kirov Tire Plant is maintained by the high rates of renewal of fixed production capital. Each year 6-8 percent of the equipment here changes. (This is a high figure if one takes into

account that in USSR industry as a whole during 1982 this indicator did not exceed 2.2 percent, for machine building—2 percent, and metal processing—1.8 percent.¹⁾

And almost every new model of machine that comes to the plant is completed and adjusted here. This is not only to eliminate the design mistakes, which occur frequently, but also, as was noted above, because not all new machines fit into the old production facilities. And because part of the incoming equipment is not equipped with means of accident prevention, and the Kirov workers are not satisfied with the existing protective and preventive devices. Many people are impressed by the attention paid to accident prevention at the Kirov Tire Plant. Another attitude is more customary—when the observance of safety rules in the shops is limited to periodic inspections.

But the Kirov workers have different traditions. When investigating an accident they look first of all for technical imperfections in the equipment (even if they can see a clear violation of the rules of operation). And they try to improve the machine in such a way that even in the case of carelessness it would be impossible to be injured, and in doing this they use their own and "others'" ideas. For example, the old assembly machines were very inconvenient: the tire casing assemblers frequently sustained injury and acquired occupational diseases since it was necessary to compress the rim of the tire by hand and the work was hard. This operation was mechanized and the Kirov workers utilized developments of the Scientific Research Institute of the Tire Industry. The machine tools were also equipped with reliable preventive devices. In the new assembly machines which the Kirov workers received recently they themselves made a number of design changes, increasing their safety and reliability.

The bicycle tire shop received several new presses. Having attentively observed the presses when they were first in operation, the Kirov specialists noted an imperfection as a result of which a female worker could be injured. They went to the scientific research institute for help. Without waiting for recommendations, they adjusted the specifications for control of the presses and precluded the possibility of injury.

They began to take accident prevention so seriously during the 1960's, which determined the destiny of the plant, and they considered this one of the most important indicators of the culture of production. The structure of management was rearranged correspondingly. At many enterprises the accident prevention division had practically no rights. At the Kirov Tire Plant they increased the significance of this service. The deputy head engineer for accident prevention had jurisdiction over the services of the head mechanic, the head power engineer and the head metrologist. The accident prevention division in this system became a controlling agency, and in response to its remarks mechanics, power engineers and instrument builders make adjustments in the designs of the equipment. The money allotted to the plant for accident prevention is assimilated annually in amounts larger than envisioned by the plans.

Such, in general outlines, is the strategy of intensification that was developed at the Kirov Tire Plant and helped it to become a leader. One

should not think that the path of the Kirov workers to leadership was smooth or that it had no interruptions, conflicts or failures. But in the final analysis these are not what determined the "stamp" and nature of this collective. Because the main principles of the strategy were observed strictly and efficiently; the enterprise never lost sight of long-range tasks or let them be swept up in daily affairs. The experience of the Kirov tire workers cannot be applied to everyone as a universal formula. Many decisions made by this collective are unique and dictated by the specific nature of the subbranch and the old enterprise. Obviously, a significant role in the success was played by the size of the enterprise, which is convenient for flexible management. But the major role was played, of course, by the innovative approach to the matter. The course toward intensification of the economy will remain only a noble wish and the formulation "acceleration of scientific and technical progress" only an empty phrase if they are not enlivened by the innovative spirit of leading enterprises which consider technical progress to be their own business. This is what people think at the Kirov Tire Plant.

FOOTNOTE

1. Kheyman, S. A., "The Development of Machine Building: Organizational and Structural Factors," EKO, No 6, 1984.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

KIROV PLANT INFORMATION SERVICE DISCUSSED

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (EKO) in Russian No 9, Sep 86 pp 48-51

[Article by N. V. Sidorova, manager of the Bureau for Scientific and Technical Information of the Kirov Tire Plant: "From Information—To Organization"]

[Text] In 1961 the Kirov Tire Plant was one of the first in the branch to create its own service for scientific and technical information. Since that time, gathering bits and pieces of information from other enterprises but more frequently developing our own forms and methods of work, we created a system of scientific and technical information at the plant. By the end of the 1960's it was formed. By that time we had also formed a branch system. A number of guidelines and methodological recommendations appeared. But the duties of the information workers were not yet clearly determined and, one might say, we created them, guided by our own experience and intuition.

Experience suggested that in order to increase the efficiency factor of information it is necessary to train production workers to use it. One must say that the scientific and technical information services were not given any guidelines or any instructions for this function. And when we began to work there were not yet any publications regarding this issue. We prepared our own texts of lectures concerning state, branch and plant systems of scientific and technical information, their role in scientific and technical progress, reference information archives, the rules of working with them, and so forth. For a number of years, beginning in 1974, we delivered these lectures differently for engineering and technical personnel of technical services, shop specialists, young specialists and workers of basic and auxiliary shops.

Previously many specialists in the area of information science thought that the scientific and technical information service should at best control the utilization of information materials. This is almost the way the function was formulated in the standard provisions concerning scientific and technical information agencies of the enterprise, which was approved by the USSR State Committee for Science and Technology in 1978.

But we think that before controlling it is necessary to help in introducing innovations. And the scientific and technical information service should engage in this.

Fifteen years ago, when we suggested to one of the plant managers that he include in an order that the scientific and technical information service should not only inform specialists about innovations, but also help organize their introduction, he did not agree with us. Soon we brought this manager some information which he valued highly. Several months later I was interested in what he had done with it. It turned out that he had forgotten about it. After our reminder the innovation was introduced. But, still, it could have been introduced much earlier....

At that time the organizational role of the plant scientific and technical information service in introducing borrowed innovations had not been written into the order, but it was fulfilled in keeping with the principle and consistently. Today the system that was developed and tested by time has been "legitimized" by an order for the plant. If specialists show an interest in information, we ask for more detailed information and technical documentation, and then send it with a control card to the managers of the interested subdivisions, we analyze the conclusions and, on the basis of these, we prepare recommendations for consideration in the minor technical council (it was created on the initiative of our service for operational consideration of ideas). After all, the plant council frequently finds it difficult to meet and therefore for considering innovations that are not of a general plant scale but, say, of a shop scale, we suggested convening only those members of the technical council who were interested or could participate in their introduction. The scientific and technical information service makes its suggestion when plant and shop plans for organizational and technical measures are being drawn up, it develops schedules for the introduction of innovations that are not included in these plans, and it checks on their implementation. Such a system makes it possible for our plant annually to introduce 90-100 innovations and measures based on scientific and technical information, and their economic effect exceeds 1 million rubles. That is, a considerable proportion of the innovations owe their appearance to technical information.

But let us consider what plant services can do today and what they are like. They consist of only one to five people. They are included in various subdivisions—divisions for new technical equipment, technical divisions, ONTIRIP (divisions for scientific and technical information, efficiency work, invention and patent work). The aforementioned standard provisions have earmarked 30 functions for them, and each function is an entire area of work, and not only for information, but also for technical propaganda. And yet the services frequently do not even have a clear legal status: they are neither bureaus nor sectors nor groups. Financial agencies, as before, include information workers as administrative and management personnel who are subject to cuts annually. We are the first to be cut and therefore our ranks have thinned out and scientific and technical information services at enterprises have become so small.

The role of these services in the life of the enterprises and in the acceleration of technical progress has been clearly underestimated. For example, when summing up the results of socialist competition and the production activity of the enterprises, their work with information is not given any attention at all. But the enterprise's contribution to the

development of the subbranch is not taken into account either, and a consumer plant which only "takes" technical progress for itself and gives nothing to others can end up among the leading enterprises. The list of indicators by which the work of enterprises is compared should include an indicator for scientific and technical information (for example, how many informational materials have been sent for branch and interbranch exchange). And now the Kirov Tire Plant sends to higher agencies scientific and technical information on up to 60 information cards, while other enterprises send only half as much.

In order to make do with "fewer personnel" to handle the volume of duties which we ourselves have increased, we are now working more intensively. And still the system that was created and strengthened over the years has not crumbled. Accounting and control over the direction of technical documentation on requests from other enterprises have deteriorated. We find it difficult to process incoming information as well. And this flow of information is increasing from year to year. Because central information agencies have begun to work more actively and, as distinct from plant agencies, more serious attention is being devoted to them. They are extensively utilizing means of automation and computers. But at the enterprises, apparently, for a long time the expanding flow of information will continue to be processed by hand, and the number of working hands is decreasing.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

COMPROMISE SOMETIMES NEEDED FOR PROGRESS

Novosibirsk *ERONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 51-57

[Article by N. S. Goloshumov, Lenin Prize winner, deputy head engineer of the Kirov Tire Plant, and A. D. Khlupin, deputy head designer: "Designers and Compromises"]

[Text] In Order Not To Be Swept Up by Events

Our design division has become one of those collectives which influence the assortment of the entire tire industry. Models of tires developed by the Kirov designers are produced at six out of the 17 enterprises. We carry out about half of the developments in conjunction with scientific research institutes. The most effective are contacts with the Dnepropetrovsk Scientific Research Institute of Large Tires and the Moscow Scientific Research Institute of the Tire Industry. Contacts between scientific research institutes and plant design services usually work as follows. The scientific research institute does the theoretical development and designs the new models. The plant designers concretize their ideas and designs and bring them in line with the conditions of their own production. Frequently the plant services engage only in the acquisition of fittings and the manufacture of the experimental model.

But we are cooperating equally with the scientific research institutes. Designers of the Kirov Tire Plant participate even in the theoretical developments. In the scientific research institute they prepare methods and take on a considerable proportion of the work for filling out documentation and interdepartmental coordination and they organize the testing of the jointly created models since the experimental stations in the scientific research institutes are larger and better equipped than those in the plant. Kirov designers, as a rule, design their own new models.

Why are we doing this and not the scientific research institute? In our plant service the atmosphere is more relaxed and in the planning there is less regulation which hampers the initiative and the search for nonstandard solutions. It is easier for us to cut through blind alleys which inevitably arise in creative research. In a scientific research institute it is very difficult to eliminate from the plan a subject which has become unpromising, and it is necessary to spend a lot of time making justifications....

Possibly the role of the scientific research institute in our union will increase in the future. The plant has exhausted all possibilities of the current assortment of products and it no longer needs modernized models of tires, but ones which are principally new. The influx of fresh ideas coming through the channels of scientific and technical information has begun to diminish lately. This means that we will need more substantial theoretical assistance from scientific research institutes. The role of the plant designers will almost not change—they will be designing new models.

At other tire enterprises the designers also perform the duties of technologist. And they engage not only in the development and adjustment of the technological process during the introduction into production of a new or modernized model, but also the technology of current production. It is probably because of this that they rarely create their own models.

Twenty years ago the KShZ decided to relieve designers of the duties of technology (they transferred them to the technologists who had appeared on the staff of our service). At that time two design divisions were organized: one modernized models of tires that were produced in series while the other did only long-range developments (in our opinion, such specialization made it possible to concentrate and effectively utilize the creative potential). We introduced into the design service an experimental station which had previously operated separately, because of which the models were not tested promptly or on time. We created our own section for manufacturing press forms and fittings for new designs. Although at our plant, as at others it is only necessary to repair the press forms and the new ones were delivered by Polyber Machine Building Plants. But if under current conditions one were to rely only on deliveries the new tire would become obsolete before it reached production. For instance, if in 1986 we submit an order to the VPO for a press form for an experimental model, we will not receive it before 1988. And at our plant the model is made in 4-6 months. Therefore we preferred to maintain our own "natural economy." All these measures, and also efficiently organized cooperation with the scientific research institutes enabled us to cut in half the time periods for the introduction of innovations (from 7 to 3-4 years). We have created a supply of ideas and are developing models which the plant will produce in 1995. Our division's portfolio has many long-range plans. For example, under the 12th Five-Year Plan at the Kirov Tire Plant it is intended to assimilate the output of radial tires with regulated [pressure. This design has the same significance of us as the first radial tire which the head specialists of the KShZ were awarded the Lenin Prize Kirov designers tried to combine in the new models the advantages of the radial and diagonal tires. The results of the tests have surpassed all expectations. The merits of the new design as compared to the diagonal one are obvious: the expenditure of textile cord in the manufacture of the tire is reduced by 40 percent, its weight is reduced by 5-10 percent, the expenditure of gasoline during operation decreases by 5 percent, and the passibility of the tires increases by 20 percent. Kirov workers were the first in the Soviet Union to begin the output of these tires (and there are none like it abroad). Our leading specialists think that the new model will produce a powerful stimulus for further development of the enterprise.

It would seem that the Kirov designers have done everything necessary in order to look to the future with confidence. But recently we have lost some confidence.

A Couple of Small Compromises

The plant design service has begun to lose the advantages it had gained. The losses are not very great so far, but the trend has started. The special division which conducted only long-range developments has been deprived of its creative "privileges" and now it also engages in the modernization of today's tires. The entire collective of the service, which is supposed to prepare for future production, is being forced to deal more and more with current affairs. Today the work of the designers on current production takes up 20 percent of their time, the mechanics and technologists of our division—40 to 60 percent—and the testers—30–40 percent (more and more of their is being spent on checking on the parameters of series production and less and less remains for testing). The mechanics and technologists are participating less in experimental design work. This takes place because the technical division is no longer in the condition to provide its own systematic monitoring of the expanding series production and specialists from our service are called for assistance and placed in the "bottlenecks."

The expanding production has swallowed up the experimental section. Now we have to wedge the experiment right into series production. Most frequently the enterprise's administration is ready even to take production losses for the sake of new models. But sometimes the time periods for the experiments are postponed (especially during the summer when it is more difficult for the plant to fulfill the plan). The tests are conducted rapidly so that the equipment will not stand idle. There is not enough time for analysis, adjustment or making substantiated decisions. We produce the entire experimental batch of new tires immediately, with a great degree of risk. Previously when we discovered a new defect we corrected it immediately, but now we do it only when the next batch is being manufactured. We turn a new tire over to testing with a defect; as a result of this it is sometimes necessary to do the testing over again.

We hope that after the reconstruction and expansion of the enterprise we will again have an experimental section. It was envisioned in the plan for the new facility under construction, but after a couple of rounds of agreements and refinements with the higher levels it was crossed out, and then it was written in again. Of course we are glad that we managed to win it back, for without such a section the plant's technical progress will begin to slow up in the end. But what is the probability that it will not have the same fate as the previous experimental section, that it will not "burn up" in the struggle for the fulfillment of the extremely difficult plan.

It is difficult to maintain the creative potential of the design service if when the pressure of current production affairs is increasing. It is no less difficult to counteract the current paperwork. During the past decade we have been experiencing the strengthening of negative tendencies associated with the total standardization of the process of creating new kinds of products. Apparently specialists in standardization in our country have crossed over the

boundary beyond which standardization which is intended to regulate and facilitate the labor of the creators of new technical equipment is being transformed into paperwork which ends up in colossal losses of time and money. For this reason, today the creation of a design of a tire requires half the amount of time that it takes to fill out the documentation for manufacturing an experimental model of it.

Again and again the question is raised to us: to work strictly according to the standards, catching technical progress by the tail, or going ahead and developing new products in the shortest possible time periods, committing certain violations of the policy for filling out documentation and thus placing our enterprise under the threat of economic sanctions from Gostandart agencies? And here the experimental models of our items are already undergoing testing and being sent to all kinds of exhibitions, but the design documentation by now is only in the stage of coordination...the technical assignment. That is, in the stage which should precede the development of the design. But even by taking such a risk and immediately jumping over three stages we still do not manage to eliminate all loss of time in filling out the multitude of papers.

All these losses, concessions and compromises, which do not seem very significant at first glance, are unnoticeably sap the potential of the plant design service as we were beginning to lag behind our previous rates. We have lost 2 years in the process of development and testing of the aforementioned model of radial tire with regulated thresher, in which the Kirov workers are placing great hopes and the future of the plant. It is not easy to make up for losses like these.

Will the Age of the Tire Last Long

It is also difficult for the leader because when blazing new trails he is the first to experience the contradictions of development. At first glance today's tasks for designers are clear: to improve the operational qualities of products, to create durable tires, and thus to contribute to intensification of the economy. But here we are developing models of radial tires for agricultural trailers. Both the scientific research institute and the plant service are still lacking experience in these kinds of developments for agricultural equipment. A number of characteristics of the future tires are not clear and there is not enough new equipment. But the main thing is that we do not know whether we are following the correct course or whether agriculture needs such tires. For it is difficult to establish feedback from agriculture. We cannot even arrange for testing of the new models in rural areas since the tracks of the experimental tires are lost in a year or two. We are limiting ourselves to tests which are conducted by stations of Goskomselkhoztekhnika. The results are heartening. But still at these stations the tires are used intelligently and in a concerned way. But how will they work on the regular kolkhozes and sovkhoses?

It is known that in agriculture the tires are frequently rendered unusable because of mechanical damage. During the past five-year plan 35.6 percent of the Kirov tires for large tractor trailers could no longer be used because of this reason. This is because of the poor roads and the poor art of operation

(frequently I myself have seen in the rural areas of Kirov Oblast trailers with neglected tires and automotive equipment which travel wherever they wish to: over nails, over furrows, over broken glass). Are not the resources of durability of our products lost in this 35.6 percent? Are we not working in vain by continuing to increase the service life of the tires?

In many European countries and the United States, specialized automotive transportation is produced for agriculture. Only trucks travel on the roads and other equipment travels on the fields (and their tires are lightweight, with low pressure so as not turn the fields into roads). Our automotive construction is proceeding along a different path. We have taken a course toward universal automotive transportation for rural areas. We are producing something in between a tractor and a truck, that is, a cross-country vehicle which is intended for critical conditions. But perhaps everything should be the opposite: we should not produce costly equipment for roadless areas, but first be concerned everywhere about good roads, without which intelligent of automotive transportation is impossible?

Life of the tire can be prolonged a great deal with careful operation. If it is only the protective covering that wears out, it is not difficult to replace—and the tire can be used again for at least half of its original service life. But now in our country we are restoring and returning to the automotive fleet only 20-25 percent of the worn-out tires. This is both because of a poor practice in their operation and because the collection of tires for restoration is poorly organized. But if we really intended to save on the country's raw material resources it would be necessary to arrange for all tires that are suitable for further use to be turned in for restoration. It is necessary also to arrange processing of those tires which can no longer be restored and return them to the national economy as raw and processed materials. But so far each year we burn tens of millions of extremely and moderately worn tires and tires that have come to an early end, they are thrown in the dump or they simply lie around in yards and on roadsides. At the same time the Kirov and other tire plants expend great efforts to improve the quality and increase the output of their products, which are in short supply up to this point; in so doing they expend even more petroleum, which is very difficult for the country to obtain.... With this kind of unconscionably wasteful consumption we will hardly succeed in covering the shortage and satisfying the consumer. There is little advantage from one-sided intensification. Intensification must embrace all aspects of the economy and provide for their uniform and proportional growth. We need an extensive art of the economy—both an art of production and an art of utilization of the products. This is necessary in order that the workers of the leading enterprises will not expend their efforts in vain.

During the years of the 11th Five-Year Plan the plant carried out 176 measures in keeping with plans for new technical equipment and also 514 organizational

and technical measures. It utilized 145 inventions and introduced 5,054 efficiency proposals with an economic effect of more than 9 million rubles. More than 1,500 people participated annually in technical creativity.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

EXCELLENCE NOT ALWAYS REWARDED

Novosibirsk *ERONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 58-61

[Article by V. S. Yarovenko, chief of the Bicycle Tire Shop, and L. A. Gontsov, chief of the Second Assembly Shop: "Overstraining Is Uneconomical"]

[Text] The article entitled "The Old-Timer Outstrips the Youngsters" discusses the fact that in the 1960's-1970's, we restructured the psychology of shop leaders. We restructured them. Now perhaps we have no unit workers at all (this is what they call production workers who were bound up in current affairs and worry only about how to produce as many "units" of product as indicated in the plan).

The majority of shop managers in our plant today understand: in order to constantly fulfill the plan it is necessary to think only about the plan. It is necessary to be concerned about updating technical equipment and technology. This must be done every day and not just in critical situations when the plan is already under fire. In almost all the shops this is precisely the way the bases for stable work are created. But none of us has the confidence that we will not fail tomorrow, that we will not change from a leader to a backward plant.

Who can be optimistic about the innovative experience of the bicycle tire plant? On instructions from the VPO it began to assimilate the production of two-colored tires and interiors made of butyl rubber, which are less expensive and better than the previous ones made of general-purpose rubber. Within short periods of time the Kirov workers installed the new equipment, which was created and manufactured here, at our plant and efficiently train the workers. And they were the first to change over to the new technology when other enterprises of the subbranch had only begun experimental work. The shop held an all-union school, and the experience of the K'rov Bicycle Tire manufacturers was approved and recommended to all analogous shops.

But the collective not only gained nothing from its leadership, but it ended up in the most disadvantageous, even absurd position. The bicycle tire manufacturers were not allowed to consistently update production and improve working conditions as they intended. They did not even manage to promptly complete the equipment of the ventilation although this was necessary: with

the new technology the vulcanizing chamber was always emitting more heat and gas.

The plan for the shop was immediately sharply increased (21 percent in 2 years). Previously the plan "jumped" not immediately up to the introduction of large innovations, but a year later, and during that time the innovators managed to bring up the year and smooth out new technological processes. But now the shop could not prepare for such a leap either economically or psychologically. In January 1985 the bicycle tire manufacturers, who had worked stably for many years, failed to fulfill the assignment for the assortment of products, and during the remaining months of last year, they were exerting all their efforts to keep up with the plan. The sharp increase in the plan is explained by the fact that there was a large shortage of bicycle tires in the country. It is interesting that the plan was not sharply increased for other bicycle tire shops of the subbranch, which had not been working as well with respect to all technical and economic indicators. The all-union shortage was to be covered through the forces of a single shop!

Another facet of this situation is very interesting. In 1985 it was planned for the bicycle tire manufacturers to sharply increase the output of new two-color tires, and in 1986—to sharply reduce it. Why? The consumers rejected the innovation.

The domestically produced dyes which we receive for the bicycle tires are dull, they fade rapidly and they are only in two colors. This skimpy range does not harmonize with the color of the bicycles. Colored rubber ages more rapidly than black does—researchers have not yet found effective anti-aging materials for it. That is, not all the necessary conditions have been created for the output of high-quality new products, the efforts of various branches of science and production have not been coordinated, and their current capabilities have not been taken into account. This is why the quality and the variety of two-color tires is worse than black tires, which the Kirov workers have always produced, and the two-color tires are more expensive.

But why was the VPO in such a hurry to have the Kirov tire workers assimilate the new production? Obviously they wanted to accelerate technical progress and reach the level of the world standard more quickly. And they did accelerate it. But the shop is a leader which has done everything expected of it and at the same time has worked with plant efficiency experts to solve a number of the most complicated technical problems and yet it has ended up playing the fool.

Such situations are not at all exceptional. The system of insufficiently substantiated, arbitrary planning from the level already achieved does not stimulate innovative initiative. The leading collectives, striving to accelerate technical progress at their own enterprise and produce high-quality products, most frequently have to encounter anti-stimuli, risk a great deal, and make great moral and material sacrifices and outlays.

Next to the plant shop, the second assembly shop is the only one in the country that produces radial tires with a spiral circle in the sides. Because of this circle we save wire and improve the quality of the product: the Kirov

radial tire "travels"—120,000 kilometers and the Barnaul tire—80,000 to 90,000. But a good price was paid for these advantages. The process of manufacturing this circle is more labor-intensive; it requires more equipment, and the space in our shop as well as in all other shops of the KShZ is extremely limited. And it is precisely because of this improvement, which increased the authority of the Kirov trademark, that the workers of the procurement section lost hope that we would someday be relieved of the responsibility of working night shifts.

If one follows direct logic, the more durable the tires the less of them one needs to produce (if, of course, all the resources of durability are utilized in operation). And then the plant that has extended the service life of the tires and improved their quality should be allowed for a certain amount of time not to increase or even to reduce the quantity of products that are produced without reducing the wage fund. This would be fair and would offer the leading enterprises more opportunities to solve social problems.

So far a consumerist attitude is taken toward the leaders and their initiative and creative research is "encouraged" only by a constantly growing plan. And if other enterprises of the subbranch failed to fulfill the plan, the management of the VPO hopes that the leaders will save the day and take the plan of the subbranch on their own shoulders. Our plant receives an additional assignment almost every month—to produce several thousand tires in excess of the plan; this burden is placed on the second assembly shops since it produces products that are in greatest demand. This is tantamount to increasing the shop plan by another 3-5 percent. They do not give order, but request to fulfill additional assignments, but try not to fulfill the request.... And if you do fulfill it, the plan for the next year is drawn up on the basis of the level achieved plus the further increase and the further additional assignments. Such an attitude toward the leaders is already a tradition. As the people say: "The one who pulls gets the load. They load us down until we are about to brake—and then they include the plant among those that are lagging behind.

Just think: should we not rearrange our psychology to the "unit" attitude again? Maybe then we will have an easier life.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

NEW VALUE SYSTEM CREATED AT KIROV PLANT

Novosibirsk *ERONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 61-84

[Article by Nina Maksimova: "On the Exposed Nerve of Contradictions"]

[Text] Intensification and the Apple Orchard

Regardless of what production problem may come up, the Kirov workers have always remembered Galina Pavlovna Galaulina and tried to imagine what she would do. This attitude toward her has remained constant, even though 10 years have passed since Galaulina left the post of head engineer of the plant to go on pension, and she died soon after that. She is regarded as a creator of an absolute system of values. But memory is not covered over with a gilded idealization. People recall that Galina Pavlovna was severe and stubborn. Because of the head engineer's stubbornness the majority of valuable technical innovations at the Kirov Tire Plant began to reach the point of introduction, but this same quality could also lead to numerous conflicts if people had not equaled her correctness. Her career was not a sudden flight, it was more an unhurried, thoughtful ascent. During 30 years at the Kirov Tire Plant she worked as a foreman, a shop chief, a party committee secretary, and manager of the plant dispatcher service and several divisions. She became head engineer at a mature age, in her fifth decade. All of her preceding positions, obviously, gave her the opportunity to see production lines from various sides and from various heights. In any position she remained a person of the system and was able to single out and consistently follow the main course. She had no family and she did not hurry home from the plant. She spent every day in the shops and might appear there both early in the morning and late at night; she was very dissatisfied if she noticed slovenliness, even in small things... "People were afraid of her, respected her, and loved her,"—this is how one of the shop managers formulated the general attitude of the Kirov tire workers toward Galina Pavlovna Galaulina.

Certain engineering and technical personnel explain the former head engineer's constant attention to the art of production by her feminine nature. In this opinion one can probably see remnants of the previous negligent attitude toward this art, which amounted to "blinds" and "flowers in chamber pots." Galaulina's methods and principles say not so much about a feminine style of management as about a vision of the interconnection between production

problems and the other aspects of life that accompany them. Galaulina was not the first to discover this—in the 1960's much was said both about intensification and about the art of production. Galaulina, being a person of system, took the fashionable course deeper and the art of production at the Kirov Tire Plant became not a superficial gloss, but penetrated all aspects of the plant's life. Everything that the head engineer of the enterprise included at that time in the gradually expanding concept of the art of production (from daily washing of the floors and specialized clothing that was close to being elegant to "face technical equipment" and sociological attention to the moods of the collective) and that which can still be included here, if one is to follow this logic, has now come to be called the "humanization of labor," emphasizing the human factor in these principles.

The head engineer linked the concepts of culture and intensification of production and made culture the point of support and limitation on intensification and technical progress. According to this idea, plant technical progress should serve people—and not just the consumers of the products, but also those who produce them; technical innovations must improve working conditions. Intensification should not lead to their deterioration or to a reduction of production quality or the overall art of production. Galaulina repeatedly discussed the fact that one should not excessively intensify labor (especially physical labor). Thus in her understanding intensification of production is not equated with increased intensiveness of labor. In spite of the apparent paradox in this judgment there is nothing contradictory in it. For intensive, hard work is fatiguing, but it is certainly not always effective. One can increase effectiveness, that is, productivity and quality and the public value of labor without increasing its intensiveness, but by organizing it intelligently and using new technical equipment intelligently. Galaulina's approach to the development of production remains progressive even today. It is no accident that today's managers of the Kirov Tire Plant, speaking from various forums, have promised to maintain and continue the traditions she established.

But much has changed at the plant during the decade. New elements have appeared in the content in the concept of the culture of production and emphases have shifted. Part of that advanced experience which made the Kirov workers leaders and which was reflected in the first article of this collection has receded into the past. Certain changes are quite predictable and were brought about by the natural course of life which has influenced our ideas. Others, also conditioned by something, have still brought us to the idea of departing from the previous course and eroding its bases.

Twenty years ago Galaulina demanded that all the work positions in the shops and plant administration be normal, that is, that they be sufficiently lighted. At that time they had not yet experienced the rapid depletion of all kinds of resources and therefore it was conventionally understood that they were inexhaustible. After 20 years of intensive development of the plant, which had not augmented its own resources, the Kirov workers began to feel their limitations more keenly than many. It is not surprising that today thrifty expenditure of energy and raw material is considered to be a sign of cultured management. The lighting in the shops is just as good, but in the offices of the divisions they turn out the lights even if the sun has not come

up completely. In the corridors of the plant administration there is twilight; when going up an unlighted stairway I was afraid of stumbling.... None of the Kirov workers have any doubt about the need for such severe economy—this is the only reason why the shop can avoid idle time during the winter and the plant has not been "cut off" from the energy network.

But today it is not only that the plant is more scantily and economically lit. Less and less attention is being devoted here to such "trivia" with which the culture of production began. The specialized clothing on which the artist and fashion designer worked have long worn out. Today the plant is "hooked in" to a system of centralized supply and it takes what they give: shirts with the badge of "chemist," "builder," "metallurgist" and even white coats that have accumulated in the stores. The once attractive colors of the machine tools and walls have turned grey. They have not forgotten that they no longer observe the rule of washing the floor and cleaning the machine tools before the change of shift—the assembly workers prefer to use these minutes to assemble a couple of more tire casings and the managers encourage this desire because the shop finds it difficult to fulfill the plan. The machine tools and machines have been added everywhere, but because of this it has become noisier and the passageways are narrower. The shop rest zones—cozy corners decorated with flowers and greenery—have disappeared. Even when Galaulina was still there in the bicycle tire shop they were unable to squeeze in a new line and at that time the head engineer permitted them to remove the best rest zone in the plant, one which she had ordered to be created. The majority of those managers with whom I spoke do not worry about the recreation zone—they say that the workers almost never rest during the shift any more. But does this not mean that the culture of production has ceased to be a way of limiting intensification, that the strategy has changed and already led to a deterioration of conditions and to increased labor tension and has violated the boundaries which were considered impenetrable?

One zone, or, more precisely, a room for psychological relaxation, by some miracle has survived. It was constructed in the vulcanization shop after Galaulina had left, and for the first time the city did not spare funds for coziness and comfort. Machinists and workers in the shop drop in here—the technological schedule still allows them to take a short breather. It is empty here now. The little fountain was turned off in order to save on water. The floor and walls have not been given fresh paint for a long time and the upholstery on the armchairs is ragged.... The light music screen has been taken away for repair and the stereo speakers, which stood right there for many years, disappeared without a trace a couple of days ago.

The loss of the previous culture is noticed literally in each step—one can hardly recall the way it was.... After the regular reductions of the staff, the sociologists and psychologists left the plant. Today nobody investigates the interrelations in the collective. Now the production workers can only smile about a suggestion to add pine-scented air freshener to the air in the shops, while previously such a thing was taken seriously. Now many managers have no time for pine-scented air fresheners—or for interrelations either....

Perhaps no less attention is being devoted to technical innovation, without which the culture of production would be unthinkable. The director Yu. A.

Vorobyev noted that they are even introducing more innovations at the plant than they did 10 years ago. But judging from what the specialists told me, the direction of plant technical progress is changing. As before, it makes it possible to increase productivity, save electric energy and steam, and improve the quality of the products, but for some reason it does not always help to improve working conditions (only safety, just as before, is not compromised). "Of course, technical innovation which clearly worsens working conditions will not be acceptable to us even today," a shop manager told me. "But it can remain neutral to it. Working conditions now are not our primary concern. Unfortunately" (like someone sinking into quicksand, I grabbed onto the coldly pronounced "Unfortunately" as if it gave me hope in reversing what was taking place....).

I became acquainted with the efficiency expert and inventor Nikolay Grigoryevich Parfenov, who is well known in the subbranch. He himself, four designers under his leadership and another 10 lathe operators and fitters created and introduced almost all the original devices for minor mechanization for which the Kirov Tire Plant is known and they are also doing a great deal to improve technology in the shops. But are they greeted with open arms? When Parfenov began to install his device for applying treads, the women who had been manually carrying and placing the heavy treads on carts greeted the innovation with cursing and promised the break the machine. Or here is the latest episode. Parfenov, working with several specialists of the plant, thought of a way to modernize the machine tools in the second assembly shop; having combined a couple of operations, they simplified the assembly process. But the assembly workers did not allow the designers of Parfenov's sector to touch their machine tools. Parfenov can give many examples like this and he discusses them without bitterness ("At first I was offended, and then I got used to it"). But how does one explain the strange conservatism of the workers? The workers do not expect to gain anything for themselves from the innovations. They know that after the introduction they can be "released" and transferred to a different position and there is no guarantee that their wages will not be less. For the new technical equipment they can be given an increased plan and norms, which say nothing about facilitating labor. And if the labor is nonetheless facilitated and the conditions improve, they "remove the harmfulness"—that is, the benefits for harmful working conditions which the workers now value so much....

The work of the women who apply the treads became considerably easier, they were not released, they did not "remove the harmfulness," and they did not even increase the norms. They were lucky because they were in the intermediate stage of the technological process and the rate here was set by machine time. But they immediately increased the norm for assembly workers. The productivity of their labor increases on modernized machine tools, but they themselves actually receive nothing from the innovation—neither easier work nor increased wages. And yet they must be retrained once again and change their professional skills. Parfenov, along with the managers of the second assembly shop convinced the specialists for norm setting that this tactic destroys the workers' interest in innovations—but the norm setters acted as was dictated by their instructions. In a similar way, technical progress is indifferent to working conditions, as the shop manager told me. Now the assembly workers who are working on modernized machine tools have

begun to produce much more defective work. Parfenov does not even know what to think about this yet: either it is defective work that is usual for the stage of assimilation or it is a fault in the new technology, or this is the way the workers are expressing their lack of interest in introducing innovations. The specific imperfections of the systems of planning and norm-setting had hampered the Kirov workers in developing their technical progress before this, but it was not so obvious until the enterprise's basic resources came close to exhaustion. Under Galaulina, they thought about how to "curb" the norm setters and decided to try as an experiment to place the divisions for organization of labor and wages under one of the deputy head engineers. But the deputy did not feel that he had enough power or qualifications and the idea was abandoned. And so to this day the "uncurbed" plant and even higher norm setters and planners continue in their own way to protect the interests of production, quietly shifting and changing the initial meaning and point of technical progress.

Recently the efficiency expert Parfenov participated in a restructuring of the technology of bicycle tire production and created a couple of new machines that are more reliable and compact than those suggested for the shop by the scientific research institute. What happened subsequently in the shop which was the first in the subbranch to assimilate the new technologies was discussed above in the note "Overstraining Is Uneconomical." Under pressure from the sharply increased plan, the extremely arbitrary social neutrality of the technological process became shaky, working conditions in the shop worsened, and the intensiveness of the production rhythm increased. I visited a party committee meeting where they were discussing the shop's condition. Participants in this discussion, in my view, were in a difficult position: one could not blame the shop, but how does one deal with the interruptions that were beginning to occur in the fulfillment of the plan? The majority of speakers nonetheless appeal to the collective to fight against "still existing shortcomings." In response workers of the bicycle tire shop promised to rectify the situation by "activating the human factor" and "revising the norms in the direction of increasing them, which would have a positive effect on the fulfillment of the plan." The party committee secretary Grigoriy Semenovitch Dobritsa tried to swim against the current and threw out to the audience questions and answers that were not in keeping with the customary tone of the discussion. It was recalled that previously it was pleasant to drop into the shop but now it is "on a level with the ancient past." After the words about activating the human factor he asked: "And what will be done in the shop that is good for the people who work there? This was possibly a response to our conversation about the departures from the culture of production that were beginning—Dobritsa was aware of this departure and experienced it deeply, but he did not yet know if he could stop it.... The secretary finally touched the heart of one of the shop specialists, and he responded bitterly: "The conditions in our shop today are such that we are ashamed to go in there so how can one demand productivity and quality!" And this complaint touched me and gave me more hope than all the correct, mobilizing speeches. "Ashamed"—this means that they have not become completely accustomed to the deterioration of the working conditions. I also recalled the words of many other workers of the Kirov Tire Plant who did not consider this situation at the plant to be normal. I had long agreed with their opinion, but the plant itself is not guilty of its deviations from the previous strategy. Giving

into the pressure of planning, norm setting and other systems and circumstances, the plant actually appears to be more the suffering victim than the guilty party. Many Kirov workers hoped that the expansion of the enterprise that had begun would create a possibility of "breathing easier" for a couple of years and thinking more about working conditions and culture. Does this mean that there is still the hope of making up the losses?

Were it not for the apple orchard, which they did not want to tell me about for a long time and which can no longer be returned....

The plant had difficulty with shipping and products. There were not enough sidings and the tire workers had only one little steam engine. At the beginning of 1985, because of all this they even failed to fulfill the plan for product sales. But the automotive container shipments are now developing successfully. And if they were to construct a container area....

When the plant's director Yu. A. Vorobyev suggested cutting down the apple orchard in order to construct a container area there the plant's head engineer, A. V. Volkov said: "I will not participate in that." The secretary of the party committee supported the director. A discussion developed around the apple orchard and they could not come to a unanimous opinion. Then Vorobyev, as they say in such cases, took all the responsibility on himself. The orchard was cut down in the early spring before it blossomed "so people would not be so sorry to see it go."

If one were to look at this seriously, an apple orchard which bears inedible wild fruit is of no use to the production workers. But in spite of the party logic they need it, or else it would not have retained for so many years its place at the enterprise where every square meter is accounted for. The tire workers recall how the apple trees bloomed in the spring. They recall that they were planted when Galaulina was there. They agreed long ago to the disappearance of the rest zone; they grudgingly became accustomed to the changes in the conditions of the shops. And even when they began to remove before their eyes the green zone which had been planted 20 years ago on work Saturdays and in the place of the comfortable square next to the plant dining room where the Kirov workers could rest for a couple of minutes after they ate there appeared a foundation, the people reconciled themselves to this, thinking that there was nothing they could do, that it was necessary to construct new buildings, warehouses and a boiler, and the possibilities of expanding the plant were limited. On the one hand was the city and on the other—the river, and right there was the territory of the neighboring enterprise.... Now there is only a memory of the apple orchard which had almost symbolic significance for the tire workers, like a fresh wound. "Part of our spirit left along with that orchard," said a production worker not at all sentimentally. The fate of the apple orchard cast an alarming light on the entire chain of deviations, revealing a strict interconnection, and it became clear that the plant had reached a critical point and that it was not only a suffering victim, but also guilty of something.

"We do not know what Galaulina would have done today," the plant's deputy head engineer A. L. Ryabov mentioned in the conversation with me. "She also sacrificed a good deal for the sake of production." "And culture?"

"Culture—no," Ryabov answered thoughtfully (and I remembered her permission to remove the rest zone in order to make way for the new line. I cannot get rid of the idea that, possibly, this compromise was the beginning of a long chain of deviations...). Ryabov showed me through his office window an area that was covered with gravel.... An apple orchard blossomed there at one time. "You see, they have left a meter-wide strip of land. We shall plant apple trees there." The meter-wide strip convinced me that the memory of the apple orchard will not leave the apple orchards in peace for a long time, regardless of how they try to convince themselves that they have done the right thing.

"Indeed, we are cutting off the branch on which we are sitting," said the plant's head engineer A. V. Volkov, who is not inclined to mask today's difficulties in the plant and cannot be consoled with hopes for a bright tomorrow. "But the constantly growing plan, which has recently exceeded our capabilities has put our backs against the wall. You already know that we deny ourselves a great deal—but we still fulfill the plan. And in the VPO the illusion is created that we are omnipotent. They are approaching the development of enterprises incorrectly today! It is necessary for a time of quantitative growth of the volumes of production to be alternated with periods of stabilization, when the plant can accumulate something that is qualitatively new. Twenty years ago the plant was given a breather and then we were able to accumulate supplies of culture. Now we are selling them. We have no other way out.

But where does this solution lead, why was the apple orchard cut down? Further and further away from the culture of production and the previous broad understanding?

"Wrong," the plant's director Yu. A. Vorobyev does not agree. "By cutting down the orchard we did not depart from the culture of production at all. On the contrary! The automotive container area will enable us to organize the shipment of products more rhythmically. And the road out of the orchard was a little bit narrow, and now we have expanded it."

Does this mean that one culture is being sacrificed for another? Beauty, a chunk of nature, a symbol of memory and tradition for the sake of culture as an economic lever? Are we not becoming too businesslike? Do we not sometimes try to strengthen the material base by impoverishing the spiritual potential and short-changing and oversimplifying the significance of culture in production? Judging from people's recollections, Galaulina was a businessperson and introduced culture into production primarily for practical purposes. But for some reason she laid a foundation somewhat broader than is necessary for the functioning of production.... But at the same time the conditions of the plant, in spite of the respite they had received, were not easy and almost nobody supported Galaulina's undertakings. But she was one of those who can swim against the current. Only that way, "against the current," can new roads be laid. But now everybody at the plant is in favor of culture, but the plant is departing from it....

Incidentally, am I not placing demands that are too great on a plant which up to this point is still the undisputed leader? All production indicators by

which the work of an enterprise are at the highest level. Even now its shops are cleaner than those at the majority of other tire enterprises.

First they tried to "pull up" the old shop through mobilization measures. For the summer months they sent there all the former assembly workers who had long ago left for other shops, but they had already become unaccustomed to this work and found it difficult to fulfill the norm. The plant director and party committee secretary came to the shop, held a meeting and discussed how much now depends on the old shop. After this the output increased, but not for long. The senior engineer-norm setting and organizer of the competition Usharkova at the end of the shift sometimes went to the most reliable assembly workers and asked them to assemble at least one more tire to save the "dying" shop plan. And once she heard from a cooperative worker: "I will not do any more. If I do one more I will fall down." "Give us people! We do not have enough people!"—Usharkova and other shop specialists went to the party committee with this despairing demand. They were answered: "The personnel division sends new workers to your shop, but they leave there." In the end the paradoxical position of the plant, which continues to set records but barely keeps up with the plan was comprehensively analyzed and it was decided to restructure it and modernize the technical equipment immediately.

And Nina Viktoravna Usharkova was to hear in the party committee (in an unofficial conversation) the question/reproach:

"And where were you personally looking, what were you thinking about?..."

What could she say? Up to this point it had seemed to her that she had approached the competition correctly. She lit up the "guiding lights" of the competition so that they would "lead people." This is what she always said. But she never thought or talked through just where the "guiding lights" should lead people.... In the heyday of the competition, when all the assembly workers were swept up by the enthusiasm they literally flooded their shop with tires. The vulcanization shop could not keep up with such a volume of work and a tire should not wait long for vulcanization—"raw" rubber is very flammable and it ages quickly, and the quality of the product can decline. Production was being flogged to death by unbridled labor productivity. "Stop your assembly workers!" certain plant specialists told the shop managers at the time. But they did not want to let the workers "get soft"....

The managers of the shops, the plant and the public organizations think about the lessons of the competition in the old shop.

The party committee secretary G. S. Dobritsa:

"We shall try in the future to make sure that the competition always goes hand in hand with technical progress.... It is still necessary to do some thinking about whether or not to take leading workers right along with other assembly workers to work in the harvest or in less skilled jobs. After all, this is economically inexpedient—to send such an ace as Zernov to do unskilled labor."

The chief of the old shop:

"I never thought this way before. But now I have come to the conclusion that it is economically inexpedient to single out 'guiding lights.' The other assembly workers become nervous and they begin to work worse."

Deputy chief of the old shop:

"It seems to me that today our shop and the entire plant need more than new technical equipment. It is necessary to change the attitude toward technical and economic problems and competition. During the 1960's at the plant, on the insistence of Galaulina, a limited piece-rate system was introduced: a worker who had done defective work was not permitted to fulfill the norm by more than 105-110 percent. Then the limitation was eliminated and the competition began for early fulfillment of the five-year plans and the norms began to be overfulfilled by double the amount. And perhaps it would have been more correct to develop Galaulina's undertaking and orient the competition toward product quality and not a race for quantity? I have special doubts about the correctness of our criteria when we visited the home plant recently. It came to me that we entered a different world. In their assembly shop, no one was fulfilling the norm by more than 105-110 percent. And no more was necessary: the shop fulfills the plan if all the workers only fulfill the norms. 'But who will be your leading workers?' I asked. 'The one who works the best and engages in social affairs.' I began to discuss our 'guiding lights,' and the shop which will not fulfill the plan if each assembly worker does not fulfill the norm by an average of 120 percent (for some reason we Kirov workers have become accustomed to receiving praise for this 'indicator of labor mastery'). My colleagues were surprised, and I envy them...."

One of the first managers of the plant with whom I also discussed the competition found such a "soft" position alien. He emphasized that the directors intended to continue to rely on the Zernov school in the future. "It is precisely on the school and not on one single leading worker—after all, one person might become capricious." I was surprised at such a cold-blooded, businesslike solution to the dramatic situations experienced by the leaders of the competition. I asked if the manager was not disturbed by the high intensiveness of the labor of the competitors and recalled that Zernov and certain others would not even go into the cafeteria during the shift. Having agreed that competition in the old shop was "a little bit harsh," the manager added that it could probably be no other way for, after all, strong people were competing....

The chairman of the trade union plant committee O. I. Vydrin said that the competition at the Kirov Tire Plant is actually similar to the creativity of the masses because the initiative frequently comes from below, from the shops. The trade union plant committee tries to direct this initiative correctly and check to make sure that under the conditions of the competition and in the commitments of the shop there are not only quantitative production indicators, but also qualitative ones, efficiency and culture of production. But sometimes quantitative indicators actually do outweigh the others, and the culture of production becomes a "pleasant dream," something which is desirable but not mandatory. And when the shops bring their increased commitments up

for public defense, the plant commission persuades them to take on even greater commissions—otherwise the plant will not fulfill the plan. "But we had to...."

This means that again "there was no other way out," and they forgot that the competition is relations and the destiny of people as well, but it has become a means of fulfilling the plan. And the "guiding lights" who were to lead the collective somewhere led to the fulfillment of the plan even if it was at any price, sometimes a very expensive one. The competition in the old plant became intensification without the "pleasant dream."

For some reason I recalled that there are no windows in this shop. There were previously. But they were boarded up. Why? Some people recall that the windows were at the level of the street and sometimes in the spring when the snow was melting rapidly the water flowed into the shop.... Others explained that after the expansion of the shop long ago, it was necessary to strengthen the bearing walls.... Incidentally, why is that so important? The main thing is that there was no other way out here or they could find none. The workers became accustomed to the fact that there was no daylight in the shop. To be honest, I did not notice the absence of windows either until I had one conversation with the shop chief. "If you wish, I will show you your paradise?" The manager took me to a half-empty room, he was proud of the square meters he had won for the shop—they had managed to crowd some warehouse in order to expand the procurement section. In Paradise, until they started working, it was clean and freshly painted. They had painted a window on the wall. This is why a master artist was needed here.... I realize that perhaps a fake window, which is sometimes painted to replace a real one, can bring some comfort. But when I think about it now, after all I have learned at the Kirov Plant concerning the price of leadership, the price of production victories, I feel suffocated. I want to return and go up to the old freshly painted wall and force open the shutters on the fake window. Let the wall open up and let fresh air and sunlight flow into the shop. And the smell of apple blossoms.

What can they take into tomorrow?

I was walking through the incompletely constructed future plant.... The tire workers call their "tomorrow" a large production building that is being constructed beyond the plant fence. Here is a new assembly and vulcanization shop. It will be headed by Leonid Andreyevich Gontsov, the current chief of the second assembly shop. At the Kirov Tire Plant he is considered to be one of the most promising specialists. Managers of the enterprise value him primarily for his technical innovation. I was also attracted by his desire to "turn" the technical innovations being introduced in the second assembly shop to the good of the people working there, to use these to improve their working conditions, and to make their labor easier. He is far from always successful and frequently his good intentions run up against a brick wall. But if people like him do not get tired and give up, I am confident that someday the wall will begin to tremble.... They say that the manager forbade the foremen and shift chiefs to shout at planning meetings. "It is difficult for all of us, we are all suffering in production. We will not exacerbate this will crudeness. Let us try to be a little kinder."

And today I walked with Leonid Andreyevich Gontsov through the incompletely constructed plan of tomorrow, through his future shop. He told me what kind of shop it would be.

No, there will be no rest zones and no rooms for psychological relaxation here—Leonid Andreyevich still thinks this is excessive. But working conditions, of course, will be better than at other shops. It will be lighter here, more spacious, and there will be plenty of ventilation. Leonid Andreyevich also intends in the future to participate personally in the development of technical innovations and to direct them not only toward growth of labor productivity and the improvement of product quality, but also toward the solution to social problems in the shop.

One thing bothers Gontsov. That the road into tomorrow will pass through yesterday. In a couple of years in the new building they will begin to assimilate new products, but it is necessary to begin with the old ones. With the diagonal tire, which is now being produced in the old shop. They will take both the new and the regular personnel from the old shop. But Leonid Andreyevich does not want to bring along any part of that atmosphere which was discussed in the preceding chapter. In principle he is not against these "guiding lights" and their records, but he also recalls that not everyone is capable of these rates. And therefore he thinks it is better if all the shop workers increase their output by 1 percent than for one to increase his 100 percent.

"Well, if some worker takes the initiative and comes to you and says that he wishes to take on a high commitment and fulfill nine or 10 annual norms in the five-year plan?" I asked him.

"Go ahead! But there will be no special conditions for him! We shall regularly move all assembly workers without exception from one machine tool to another, from one size of tire to another. So that there will be no advantageous positions or advantageous work. Or so that everyone will enjoy the advantages equally."

During my talk with Gontsov I involuntarily remembered one worker with whom I had also become acquainted at this plant. Sergey Konstantinovich Krokulev—he comes from a family of tire workers, he is 35 years old, and he and Gontsov are of the same generation. When he came to the plant after the vocational and technical school Krokulev experienced in abbreviated form much of the way the leaders of the competition in the old shop lived. He wanted to be on display: he tried to distinguish himself in his work place, he submitted efficiency proposals and he spoke at meetings. They noticed Krokulev and decided to raise him "to the level of Zernov," to make him a "guiding light" of the first magnitude. They suggested that he adopt an increased commitment and when he had doubts they promised "to contribute to its fulfillment." But Krokulev refused. He explains this by saying that he recognized that if he tried always to be first there would be the temptation to do this by not altogether honorable means, that in the struggle for leadership one can lose in oneself something that is more valuable than leadership.... Since that time, as one of the managers put it, they left Krokulev alone. They stopped

placing their hopes in him. And in fact he does not fulfill norms by 200 percent. He works well, but he does not intend to devote all of his effort to production. He reads a great deal. Not only scientific and technical literature. Tolstoy, Dostoyevskiy, Chekhov.... He thinks a lot. Not only about concrete production problems. More about technical progress in general, about life, death and immortality, about nature and human relations. Because of his inclination to philosophize, some people call Krokulev a demagogue, some call him a "Wonderkind" and "Professor," and some call him a real intellectual. Recently Sergey Konstantinovich—the fool!—decided to improve human relations in the brigade (he himself is the brigade leader). So far his results are no better than Gontsov's, who tried to influence the orientation of technical progress. But both Krokulev and Gontsov have the same stubborn opposition to circumstances and inertia, that constant readiness to swim against the stream which distinguished the former head engineer of the plant, Galina Pavlovna Galaulina. I thought that Sergey Konstantinovich Krokulev would fit very well into the new shop which Gontsov wants to create, but here is the problem: the shop does not need Krokulev's occupation. New people will probably have to swim against the current and search for new paths alone....

What will your tomorrow bring, leader-plant, veteran-plant, living on the exposed nerve of contradictions? What will you acquire and what will you lose? "Come back in 4 years when the new shop is on its feet—and you will see," Leonid Andreyevich Gontsov invited me.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

MAINTAINING LEADING POSITION DISCUSSED

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (EKO) in Russian No 9, Sep 86 pp 85-92

[Article by Yu. A. Vorobyev, director of the Kirov Tire Plant: "To Remain the Leaders"]

[Text] Obviously, any advanced experience can also have negative consequences. This is clear from our plant's example. It is experiencing a difficult time, and the difficulties were generated by our successes, by everything for which people continue to praise us. The Kirov Tire Plant was able to double its production volume in 2 decades without expanding the areas of the shops and without increasing the number of personnel. The increase is carried out basically as a result of internal resources of the enterprise and intensification. But there are limits to intensification. If one were to take a critical look at our economic indicators it would become clear that the plant's resources are becoming exhausted. Yes, we expend steam and electric energy more economically than anyone else—but otherwise we would not survive because our energy capacities are insufficient for the expanded production and the system of communications is inadequate. The plant reminds one of a maturing man who is still going around in adolescent clothing, even though his sleeves only come to his elbow and his clothing is coming apart at the seams. Transportation has long failed to satisfy our needs and we need 2.5 times more warehouse space than we have now. Therefore, the Kirov workers have learned to derive advantage from each square meter of production space. And we utilize our equipment by more than 100 percent. Many people are impressed by this figure. And yet there is nothing improbable in this indicator. It is simply that we constantly maintain all tools and machines in working condition, we have reduced idle time to a minimum...and we have intensified repair. That is, we carry it out in reduced time periods, and some of the time intended for repair we are already using to produce products. One can easily imagine the efforts this costs us if one recalls that, although we are striving to update our equipment constantly, about half of it is old enough to be withdrawn because of being worn out and obsolete (since the plant itself is so old). To be sure, for us it works better than some new equipment.

Because of this style of management our plant has been given the name of an enterprise of high production culture and a collective of communist labor and, in spite of its limited capabilities, for a long time it has been a leader of

the tire industry. In 1966 the Kirov Tire Plant was awarded the Order of the Labor Red Banner for the successful fulfillment of the seven-year plan and then it won challenge red banners many times in the all-union and branch socialist competition. Did this leadership provide any advantages for the plant? The average earnings of the Kirov workers are certainly not the highest in the subbranch, they are in 7th place (and there are only 17 tire enterprises). But still we have certain advantages. Almost every quarter when we receive the challenge red banner for winning in the socialist competition we also receive a bonus of more than 40,000 rubles. We use about 28,000 for bonuses for plant workers (if one takes into account that we have several thousand workers, this bonus is almost symbolic and does not provide an essential increase in the earnings). And the rest of it goes to the funds for social, cultural and domestic measures. Each year we contribute to this fund no less than 50,000 additional rubles, expanding it by 15 percent. So the plant-leader obtains more opportunities for developing social, cultural and domestic measures. We have a palace of culture, a good recreation base, a polyclinic with modern equipment, and we are constructing a hospital. There is no waiting line at the plant for placing children in kindergartens and day nurseries. The waiting line for residential space is not yet decreasing, although each year more than 300 families improve their living conditions. But previously the ones on this waiting list were people who lived in poorly built apartments, and today the majority have good housing but they need more space. The Kirov Tire Plant is the only one in the subbranch that is constructing all of its social, cultural and domestic facilities through its own forces. The construction base in our city is too small and therefore we have created our own large division for capital construction (OKS). Of course only an enterprise that is standing firmly on its feet is capable of maintaining such an OKS.

The plant-leader receives not only advantages, but also an additional burden. I have in mind not only the so-called additional assignments, although they have become a burden; previously they came to us with such requests episodically, but now they are constant, and the assignments are larger and larger. The leader must also share its experience with the other collectives. On the basis of this we hold schools, seminars and conferences, and we must greet all guests joyously, "open up to them," and show our colleagues everything that interests them. They also ask us to send our best workers to other enterprises so that they can arrange new productions there. For example, at the young Chinkent Plant, over which several leading enterprises of the subbranch have patronage, we are helping to arrange the work of two shops.

This additional burden is honorable, but it is very difficult. Today each step we take forward is more and more difficult. We are forced to reduce the rates of growth of the production volumes. For about 3 years now we have not been able to shake the feeling that we are fulfilling the plan with our last forces. We are putting deeper and deeper reserves to work. Indeed, we have not managed to maintain all of our previous positions. In the end it will be necessary to concede something in order not to cause harm to production. A little less attention will be devoted to the external appearance of the premises (although this certainly does not mean that the plant managers today underestimate the significance of culture for production). Or, for example,

it is time to repair the kindergarten, although the machine tools are also in need of immediate repair. Where should we send the workmen? First to the machine tools.... But we plant managers must be concerned to make sure that things put off until later are eventually done; it is necessary to find the forces in ourselves.

Our difficulties are exacerbated by the new personnel and the change of generations at the plant. Incidentally, even today we are still one of the most stable collectives in the subbranch—personnel turnover is two-thirds of the average branch level. But those who 40 years ago constructed the Kirov Tire Plant and put the first shops into operation are ready to take a well-deserved rest. In their day they were able to make the old enterprise progressive and turn it into a unique school of advanced experience for the entire subbranch. This generation has become accustomed to difficulties and learned to overcome them, and it consisted of reliable workers who were devoted to their plant. Can and will the new generation continue the tradition of the older workers, will the remarkable traditions not leave the plant along with their creators? The young contingent is unstable. Seven out of every 10 young people coming to the enterprise will leave within a couple of months. There has been more absenteeism and other violations, although even so we have less than other plants. It is difficult for the young workers to become accustomed to the intensive production rhythm, and many people find our rules, requirements for safety precautions and for production discipline excessively strict. And it has also become more difficult for us to observe them. For example, with the present shortage of working hands it is not easy to fire a newcomer who has been absent during his first year at the plant. But we are trying not to reduce our demandingness for we understand that otherwise the collective will lose everything valuable that has been accumulated over the decades.

Dynamics of Labor Productivity and Number of Workers
at the Kirov Tire Plant, 1965 = 100%

Indicators	8th	Five-Year Plans		
		9th	10th	11th
Increase in labor productivity	134.0	165.8	186.9	209.4
Increase in number of workers	122.5	124.7	124.3	120.5

Dynamics of Losses From Defective Work

Units of Measurement	8th	Five-Year Plans		
		9th	10th	11th
In percentages of production cost	0.088	0.064	0.066	0.053

Products Produced in Rubles Per One Worker

<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
35,766	36,517	37,251	37,958	38,860	40,400

Maximum Level of Expenditures: Kopecks Per 1 Ruble of Commodity Output

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Kirov Tire Plant	81.6	81.3	81.9	79.9	79.1
Average for branch	87.9	87.8	83.4	86.3	85.4

Average Percentage of Fulfillment of Output Norm by Piece-Rate Workers

<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
118	118.5	119.7	120.2	120.8	122

In the past our enterprise was in a special position in Kirov—the working conditions were better here than in other plants of the city and the wages were higher. Today the situation has changed. Many plants with modern equipment have appeared nearby. Although in our subbranch our collective is still considered to be the leader in technical progress and culture of production, we are aware that the culture of tire production is appreciably distinguished, say, from the culture of instrument building. In the instrument building plant that is located nearby they work in white smocks, and in our shops we are a long way from white smocks. The youth of the 1980's are skeptical about minor mechanization and "home-grown" technical progress, to which we have devoted so much effort and of which we are so proud. These machines are effective, but the effect from them is not striking. And youth would prefer robot equipment and computers, which are praised so much in the newspapers, radio and television. All this causes our specialists also to critically rethink our own achievements and no longer be satisfied with them, and to think of new ways of developing production. There appear doubts, a lack of confidence and alarm which are natural for a transition period.

And still I think that in spite of today's critical situation we can think calmly about tomorrow. I am confident that the reconstruction and expansion of the enterprise that have been started will enable us to augment all resources and open up space for further development. For several years intensive methods of management will be combined with extensive ones. By constructing a new building we will increase our production space 1.5-fold. Half of the additional space will be used for new capacities, and the other half for technical reequipment. Because of this, we will be able to "unload" the old shops which are indeed overfilled with equipment, and we will move some of the machines to the new building. This will enable us to improve working conditions in the old shops, and space will appear here for technical and economic maneuvering, which will make it easier for us to further improve

technical equipment and technology. In the new building, the first section of which will be received for operation this year, we will begin the assimilation of the production of new designs of tires, including the aforementioned radial tires with regulated pressure. Following us, these tires will be produced by other plants of the subbranch as well. Thus the Kirov Tire Plant will significantly confirm its status as an innovative collective and a leading collective.

Several warehouses will be collected at the enterprise, we shall increase the communications network, and we shall reinforce the energy base. Moreover, we shall not only satisfy today's needs, but we will also be given a "hope of growth" and reserves for further development will appear. We shall almost double the size of the base GPTU. During the change of generations that is occurring all the time, we became convinced that it is necessary to train skilled workers mainly in the school, that these people are assimilated more rapidly and remain in production better than people who come in "off the street." We shall reinforce our ties with the vocational and technical school as well as, in time, with the institute and tekhnikum since many well-trained specialists now come to us from there.

The number of workers of the expanded plant will increase insignificantly and therefore it will be necessary to staff the new shops at the expense of existing ones, and take some of the laborers and engineering and technical personnel from them. So today it will be necessary to search out possibilities of further streamlining and technical improvement of the existing shops in order to reduce the number of people working in them. This is a difficult task because it seems that we have squeezed out all the reserves there. But this is not the first time the Kirov workers have had to assimilate new productions with a minimum of funds. The plant is being given a "respite": for 1986 they have planned for us only a 0.4 percent increase in product output. True, in the past we have been able to "catch our breath" not for a year, but for several years...but there is no point in complaining that each year it becomes more difficult to develop production. These conditions are dictated by life itself, it is necessary to become accustomed to them, and, in spite of everything, we must retain our high creative potential. Kirov workers have managed to do this up to this point.

We shall try in the future as well to combine high labor productivity with high quality. Herein lies the meaning of intensification. But the desire of the collectives to make high-quality products is not sufficiently encouraged so far. But we should not hope that people who produce these products will be allowed not to increase or even to reduce their production for a time. There will be no such encouragement—at least not in the near future. For shortages still exist, and it is not without reason that the production workers are called upon to produce high-quality goods, but to produce as many of them as possible. Obviously, even for the normal activity of the enterprise it is necessary to have both qualitative and quantitative growth of production. A desire for this kind of development is typical of the Kirov Tire Plant; I think that it will always search for and find possibilities of deepening the intensification of production. Even in spite of the fact that this leads frequently to an overloading of the collective and to the difficulties that have been discussed above. Because this is a collective with a developed

sense of ambition to be a leader, which is for good reason called the motive force of progress. Of course we do not intend to construct the entire strategy of the economic activity only on ambition, but we must not forget about it either. When speaking before the collective the managers of the plant always emphasize that we must not let the quality of our work deteriorate, for other enterprises are catching up with us.

Technical progress, the culture of production and socialist competition are not a goal in themselves for us; today these are three basic resources of intensification of production with which we shall continue to use in the future to combine high labor productivity and high product quality. I have repeatedly heard the opinion that socialist competition has become outdated and no longer plays its former role in the life of the collectives. In our plant it is as important as it ever was and has become a powerful stimulus for labor productivity and working skills. I consider the real worker to be not someone who simply fulfills the norm, but one who strives to overfulfill it. We shall continue as before to extensively publicize the experience of the leading workers who fulfill the five-year plans early, we shall encourage their successes in all ways, and we shall utilize for this purpose various forms of material and moral incentives, changing them and keeping with the changing demands and preferences. It is impossible to imagine our plant without active, clearly expressed labor rivalry. Were it not for the competition and the achievements of the leading workers, the Kirov Tire Plant would perhaps not be capable of fulfilling the growing plan.

Socialist competition and technical innovation and a striving for culture of production are necessary to the plant both today and tomorrow. They will help us to efficiently assimilate new productions and update the old shops. They will help the old plant to stay modern.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

BENEFITS FROM TECHNICAL EQUIPMENT IN AGRICULTURE DISCLOSED

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 93-111

[Article by S. V. Moskvina, candidate of economic sciences, sector chief of the Central Scientific Research Institute of Technical and Economic Research and Information on Tractor and Agricultural Machine Building (Moscow): "Technical Equipment in Agriculture and Its Return"]

[Text] The task set by the 27th CPSU Congress of completely supplying the country with foodstuffs requires rapid development of agricultural machine building. The Basic Directions for the Economic and Social Development of the USSR During 1986-1990 and the Period Up to the Year 2000 envision technically restructuring production in this branch, increasing output and improving the structure of machines and implements, increasing their productivity 1.5-1.8-fold, and creating various kinds of new models of agricultural equipment.

There Is More Technical Equipment. But the Results?

During the past 10-15 years the technical supply for agriculture has increased appreciably. An immense fleet of technical equipment has been accumulated: more than 2.7 million tractors, more than 820,000 combines, and hundreds of thousands of other machines. During 1966-1980 the fleet of tractors increased more than 1.5-fold, and the total amount of power has more than doubled. During these same years the deliveries of mineral fertilizers per 1 hectare of planted area has tripled—from 122 to 366. The quality of tractors and agricultural machinery has improved and the range of implements to be used with tractors has expanded.

The USSR Food Program for the Period Up to 1990 envisions further development of the material and technical base of the country's agroindustrial complex. The primary task that was named was to complete comprehensive mechanization of farming and animal husbandry.

But during past years the productivity of agricultural production has lagged significantly behind its technical supply. Thus during 1965-1980 the fleet of agricultural equipment in our country more than doubled, the supply of combines for agricultural production increased more than fourfold, and the energy supply per 1 hectare increased almost 2.5-fold (see table), but the

productivity of grain crops increased 1.6-fold, vegetables, 1.2-fold, sugar beets, 1.6-fold, and cotton, 1.37-fold; the productivity of potatoes even decreased by almost 7 percent. If one were to take individual grain crops, during the 15 years under consideration the productivity of winter wheat increased by 37 percent, spring wheat—2.3-fold, oats—42 percent, corn—25 percent, rye—17 percent, buckwheat—only 9 percent, and millet even decreased by 5.5 percent.

Dynamics of Relative Indicators of Technical Supply and Effectiveness of Agricultural Production

Indicator	1965	1970	1975	1980	1980 in % of 1965	1980 in % of 1975
Supply for agricultural production, units per 1,000 hectares:						
Tractors	7.7	9.6	10.7	11.8	153	110
Combines	2.5	5.5	6.4	7.4	396	116
Energy availability for agricultural produc- tion, horsepower per 1 hectare	1.13	1.63	1.9	2.8	248	147
Including tractors	0.41	0.54	0.7	0.88	225	126
Grain harvest by one combine, tons	233	300	206	262	145.6*	127.1
Productivity of 1 hectare of grain crops, quintals	9.5	15.6	14.7	14.9	157	137
Production cost of 1 quintal of grain crops (not including corn), rubles						
On kolkhozes	50	50	69	76	152	110
On sovkhoses	66	53	94	84	127	89.5
Direct expenditures of labor on production of 1 quintal of grain crops (not including corn), man-hours						
On kolkhozes	4.7	1.9	1.9	1.4	29.9	73.5
On sovkhoses	2.4	1.2	1.5	1.2	50.0	80.0

* 1978 as compared to 1965 (at maximum level).

On the average the productivity of animal husbandry not only did not increase, but gradually decreased in spite of the considerable volumes of capital investments and the expansion of deliveries of technical equipment for farms and feed production. Thus, for example, the average annual milk yield from one cow decreased during the 10th Five-Year Plan from 2,350 kilograms to 2,222 kilograms, or by 5.5 percent, and the average annual yield of wool—from 3.2

to 3.1 kilograms, or by 3 percent.¹ The productivity of animal husbandry is determined not only by the level of the technical base, but also by the level of the feed base. Therefore a good deal depends on the improvement of the quality and structure of the feeds and more intensive development of breeding work. In spite of the increase in technical support for agricultural production, the increased productivity of the main crops, and the reduction of the labor-intensiveness of their cultivation, the production cost of agricultural products is constantly growing. Thus during the period under consideration the production cost of 1 ton of grain (not including corn) increased by 27 percent on the sovkhozes and by 52 percent on the kolkhozes (see table). There was also an increase in the production cost of raw cotton—by 47-75 percent, vegetables—by 41-48 percent, sugar beets—by 47-56 percent, and potatoes—2.3-2.6-fold, and this was to a greater degree on the kolkhozes than on the sovkhozes. During the 10th Five-Year Plan the increase in the production cost of 1 quintal of grain (not including corn) was also extremely significant: on the sovkhozes—by 20 percent, and the kolkhozes—by almost 30 percent. The production cost of the main products in animal husbandry during the 15 years under consideration increased as well: for 1 ton of weight gain of cattle—the increase was 114-123 percent, and for 1 kilogram of wool—132-240 percent.

This is related to the influence of both objective and subjective factors. Among the main reasons for the increased production cost of the most important agricultural products during the period being analyzed one should include the change in the structure of expenditures on their production. A predominant place in it is held by amortization deductions which, however, did not lead to an adequate reduction of expenditures on wages. Thus the sum of annual amortization deductions in agriculture increased from 1965 through 1980 more than fourfold while the labor-intensiveness of the production of 1 quintal of grain decreased to one-half to one-third the previous level. But the increase in wages because of the change in the payment for labor by 15-20 percent outstripped the growth of labor productivity of agricultural workers.

Another reason for the increased costs of the main agricultural products is the fact that the growth of labor productivity is lagging behind the growth of fixed capital, which shows that they are not being utilized intensively enough. Thus during 1965-1980 fixed production of capital of agricultural enterprises increased almost 2.4-fold while labor productivity in rural areas increased by 80 percent; in recent years it has even decreased. As a result, there has also been a decrease in the average annual rates of growth of the volumes of production of agricultural products and output capital ratio. For example, while under the 8th Five-Year Plan the average annual rates of increase in the volumes of gross output amounted to 21 percent and in the 9th—13 percent, under the 10th Five-Year Plan they dropped to 9 percent, and in crop growing amounted to 10 percent while in animal husbandry they were 8 percent.²

The retardation of the growth rates is explained, among other reasons, by increased scale of production of agricultural products, the imperfection of the structure of fixed capital and the fact that the output-capital ratio is lower than it is in other branches of the national economy. The proportion of buildings and structures in agriculture is considerably higher than, for

example, in industry, and during the period of 1965-1980 it increased. And the conditions for the functioning of the active part of capital—machines and equipment—are specific. During the aforementioned period there was a significant increase in the prices of technical equipment (they sometimes outstripped the increase in its productivity) as well as construction and other materials. Therefore the growth rates of agricultural production in the current stage are determined not so much by the level of its technical supply, absolute or relative, as by the quality of technical equipment and the level of its utilization, storage, technical servicing and repair. In the final analysis we are speaking about the level of management of the entire mass of technical equipment used in the branches that are included in the agroindustrial complex that produce, utilize and service equipment, and are also related to bringing agricultural products to the consumer.

Quality of Technical Equipment and Demands on It

The problem of the quality of agricultural equipment remains fairly critical. It seems that this is not so much a matter of quality of individual kinds of equipment as of comprehensive indicators for various groups of machines and implements, their interreplaceability, and the provision of tractors with the necessary set of implements.

It is important for the qualitative characteristics of the machines to correspond to the needs of concrete areas and regions. This can be achieved through expansion of the sphere of application of zonal (regional) systems of machines. We are speaking about an efficient fleet of agricultural equipment: for the country, for the various regions (zones) of the country and for individual farms. It is based on a set of standard jobs and average conditions for performing them in the basic soil and climate zones of the country. The creation of efficient complexes of machines and control of them is especially effective in modern agroindustrial associations (APO's) that specialize in the cultivation of certain crops and produce a certain range of products. In an APO one can achieve an efficient structure of all technical means for special, interbranch and general purposes. The results of such a "technocoenosis" is formed even in the stage of preparation of the documentation for the new item,³ taking into account the conditions of series production and the demands of the consumer.

Collisions arise here as well: the comprehensiveness of the indicators of the quality of machines depends on how the consumers formulate their agricultural demands. Sometimes they do not reflect the demands for quality of the sets of machines and equipment. Thus in the agrotechnical requirements for tractors with 150 horsepower there is no information at all about the range of machines for it. This approach always leaves room for criticism of industry. The level of preparation of agrotechnical specifications leaves something to be desired: more than 70 agrotechnical specifications for the new system of machines did not meet GOST 15.001-73, since they did not contain mandatory data concerning the demand and the limit price of the machine.⁴

The policy that is in effect for coordinating agrotechnical specifications is also in need of improvement. For example, according to calculations of specialists, of the 427 kinds of machines that were subject to be developed

under the 11th Five-Year Plan, by the time of the approval of the system of machines 150 had no agrotechnical specifications. According to the results of an analysis conducted by the All-Union Institute of Agricultural Machine Building (VISHOM), more than half of all the time allotted for the creation of a new machine goes for the development and coordination of documentation and for conducting tests before they are accepted. An average of 35 percent of the time goes just for coordinating and approving documentation with the client departments while the normative is 12.5 percent.⁵ Under these conditions the developers simply do not have time for thinking about the quality of the machines they create or their future capabilities or comprehensiveness.

The utilization of technical equipment depends not only on its design improvement, but also on the quality of manufacture. The reliability of machines under field conditions is predetermined by many things: the design itself, the quality of the casting, the precision of the processing and assembly of parts and components, and so forth. As an analysis conducted by Taganrog designers showed, more than 70 percent of the breakdowns of combines during operation are caused by production defects. Therefore the intensiveness of the utilization of agricultural machinery depends on the technological discipline of their manufacture, the work of the division for technical control, the quality of the forged and stamped pieces and the batching items for them which comprise up to 60 percent of the cost of the prepared machine.

So far the fairly poor quality of the manufacture and the incomplete batching of certain kinds of agricultural technical equipment cause increased expenditures on its repair. Annual expenditures on technical servicing and repair amount to about 7 billion rubles.⁶ Machine operators and repair workers spend approximately 60-100 man-hours just on eliminating production defects and preparing a new combine for harvesting. If one takes into account that approximately 100,000 grain harvesting combines are delivered to agriculture annually, the losses on correcting production defects and transportation damage and bringing the combines up to the proper condition amount to an average of 8 million man-hours a year. This is tantamount to an annual load of several repair plants.

The reverse side of the coin: the effectiveness of agricultural equipment depends on the actual utilization of its capacities, the conditions for application, storage and so forth. More than 80-90 percent of the entire economic effect from the creation of new agricultural equipment is realized in the sphere of its operation—in agriculture. Therefore, the main direction for increasing the effectiveness of agricultural production lies in agriculture itself. This means putting the increased production and technical potential to work.

Why the Tractor Works at Half-Capacity

As analysis shows, the technical capabilities of agricultural machines are frequently utilized by only 30-40 percent. Large losses of working time, for example, of grain combines—(about 25-30 percent of the operating time)—are idle time caused by organizational factors, waiting for transportation to load

the grain, bringing in fuel, and so forth. Other typical reasons for idle time are: elimination of breakdowns—about 15 percent, technological interruptions (adjustment and so forth)—approximately 5 percent. Investigations of the operation of the Niva and Kolos grain combines conducted by the Taganrog designers in a number of regions of the country showed that 15-20 percent of all the breakdowns take place because of operating conditions. Idle time of tractors for refueling, technical servicing and elimination of malfunctions reached 40-50 percent of their shift time.

The reasons for this are the shortcomings in the organization of the utilization of machines and equipment, the weakness of the technical service and repair, and the poor qualifications of the machine operators. The farms violate the rules of technical servicing and operation of tractors: they do not adhere to the time intervals for conducting technical inspections, the inspections are not conducted completely, and the materials are not always the ones that are needed. The quality of repair of agricultural equipment also remains low. Pre-repair diagnosis is not sufficiently utilized, as a result of which not only the broken-down component, but the entire tractor or combine will be sent in for repair. The postrepair service life of agricultural equipment is, according to data of the Scientific Research Institute of the Automotive and Tractor Institute (NATI), about 50 percent of the service life of new tractors, although according to the standard it should be no less than 80 percent. As a result, the technical service life of tractors and combines invested in their design is not fully realized in practice.

Another reason for the insufficiently intensive utilization of agricultural equipment are the disproportions in the development of the technical base and the infrastructure for agriculture. Thus the practice of authorial supervision conducted on many farms of the country showed that combines are stored in gross violation of the standards. The only exceptions are the farms of the Estonian SSR, Gomel and Kirovograd oblasts, where they are careful with the technical equipment. A paradoxical pattern was revealed: the more technical equipment there is on the farms, the worse it is stored and the more negligently it is operated. In spite of the operating instructions, many important components and parts are not removed and sent to the warehouses, and the machines themselves are stored out in the open. Thus on the farms that were investigated in Taldy-Kurgan Oblast, not a single combine engine was prepared for storage. About 70 percent of the engines were not prepared for storage on the farms that were inspected in Poltava and Lipetsk oblasts, the Mordovian ASSR and the Azerbaijan SSR. This reduces the service life of the engine to one-half to one-third, and leads to additional expenditures on repair, although the service life of the engine corresponds to the service life of the combine and capital repair is not envisioned. On many farms a large proportion of the combine are not cleaned of dirt and residual stubble before storage. This leads to premature wearing out of the components and parts of the machines and creates an artificial shortage of spare parts.

From year to year the supply organizations have asked for more and more spare parts: cutting blades for equipment, drive chains, V-belts, and other components and parts. An investigation conducted in 15 oblasts and republics showed that 60-70 percent of the combine blades are not sent to the warehouse, are not prepared for storage and rust out in the open. Naturally, after this

the demand for them increases sharply. Yet if expenditures on maintaining the equipment were increased by 15 percent, the expenditures on repair and technical servicing would be reduced by the same amount.

One of the important factors in increasing the effectiveness of agricultural production is efficient expenditure of spare parts. Now more than 40 percent of the cast steel and about 27 percent of the rolled ferrous metals and cast iron are used on their manufacture,⁸ and the volumes of their production exceed the output of the machines themselves. Nonetheless the demand for these is not fully satisfied. The inadequate restoration of worn-out parts and components also contributes to the creation of an artificial shortage. For example, according to estimates, only about 20 percent of all the list of spare parts for tractors are restored at repair enterprises and used again in work, and it would be possible to restore considerably more of them. Finally, the difficulties with spare parts arise because of mismanagement: in a number of oblasts an average of from 10 to 15 percent of the good, usable machines, aggregates and parts are sent for scrap metal, and on certain farms up to one-third of the usable spare parts are sent there.⁹ Rear axles and engines of tractors, combines and trucks, entire seeders and cultivators, axles and frames of powerful tractors and even the tractors themselves are sent for scrap metal. All of this could be used in the field or in repair. Up to 80 percent of the components and parts of tractors that are written off for scrap metal can be restored and used again. Nonetheless, the kolkhozes and sovkhozes annually write off up to 200,000 tractors as scrap metal.¹⁰ The scale of the irreversible losses is shown by this fact: one could conventionally say that 80,000 to 100,000 of these tractors are suitable for utilization.

A paradoxical chain arises: the agricultural enterprises, blaming a shortage of spare parts, produce fewer products; the supply organizations correspondingly increase their orders for machines and spare parts; industrial enterprises increase their production capacities for producing technical equipment for agriculture; agricultural enterprises, freeing themselves of unnecessary technical equipment and spare parts, send them for salvage. And as a result, there is a shortage of agricultural products with an increased shortage of agricultural equipment and spare parts for it.

Paths of Restructuring

The decree of the CPSU Central Committee and the USSR Council of Ministers of 4 April 1983 concerning measures for further raising the technical level and improving the quality of machines and equipment for agriculture and deliveries of them in 1983-1990 earmarks a broad program of work for radically improving not only the quality and technical level of agricultural equipment, but also its utilization, service, repair and storage in agriculture. It envisions the introduction of progressive forms of organization of the utilization of technical equipment, industrial technologies for the cultivation of agricultural crops, the construction on the kolkhozes and sovkhozes of garages, service points and machine yards with spaces, sheds, warehouses and garages for storing technical equipment, and also the construction and reconstruction of the repair and operation space, that is, improvement of the entire infrastructure for agriculture. Technically substantiated norms for

the expenditure of spare parts and also guaranteed supply of them to the kolkhozes and sovkhoses will become more widespread. It would also be expedient to arrange guaranteed technical servicing of machines and equipment—the delivery and receipt of tractors and agricultural machinery that have broken down and the delivery of the repaired machines with a guarantee of their serviceability.

Effective utilization of agricultural equipment is impeded by the poor qualifications of tractor and combine operators. Thus an investigation of hundreds of farms in the European part of the USSR and Kazakhstan showed that up to 30-40 percent of the workers operating combines are unskilled and sometimes they do not even have a driver's license. Many of the machine operators have been working for less than 3 years and thus their output is much lower than that of skilled workers. Because of the poor qualifications of the operators the combines are run with working parts that are not adjusted. This leads to increased losses of grain, idle time because of breakdowns, failure to keep up with the agrotechnical time periods and plans for harvesting, and shortages in the harvesting of grain.

Moreover, in general there are not enough machine operators. Thus in Kazakhstan an average of only 70 percent of the fleet of combines is provided with machine operators, and in a number of oblasts only half of them are. The shortages made up for with machine operators, frequently randomly chosen, who are sent from the Western regions of the country. The same situation can be observed on the farms investigated in certain oblasts of the RSFSR. In particular, the provision of labor resources for agricultural production in the Urals comes to about 85 percent, including tractor drivers—75-80 percent.

The increased complexity and cost of technical equipment used in agriculture require increased skills on the part of machine operating personnel. Many machine-building enterprises have arranged training and improvement of their qualifications. Thus in permanent courses of the Minsk Tractor Plant named V. I. Lenin each year 500-700 people undergo retraining. The creation of mobile harvest and transportation detachments will help to improve the utilization of technical equipment and solve the personnel problem. The collective contract significantly increases productivity and improves the quality of the labor of machine operators.

Thus increasing the mass of technical equipment used in agriculture and related branches requires improvement of the system of control of material and labor resources of the agroindustrial complex. We are speaking primarily about improving the structure of fixed production capital, streamlining the fleet of agricultural and other equipment, expanding the sphere of effect of zonal systems of machines, and so forth. Even now one can see the need for considerable development of technical means for initial processing and storage of agricultural products and also for the repair and maintenance in working condition of tractors, agricultural machinery and other equipment. Structural changes in the system of machines for comprehensive mechanization of agricultural production are envisioned for 1981-1990. The proportion of technical means for crop growing will decrease from 52 to 50 percent, and the proportion of means for animal husbandry and feed production will increase from 26.2 to 28.9 percent.

The growth of the fleet of machines and its capacity should lead to increased productivity and increased return from agricultural production. True, there is no direct proportional dependency here; one cannot say that if the fleet of technical equipment increases so many times, the productivity of the crops will increase by the same amount, the production cost will decrease, and so forth. The dependencies that exist here are much more complicated. It is quite important now to discover and utilize them in the system of management of the agroindustrial complex.

On the basis of the dynamics of the most important indicators over a 30-year period we have constructed predicted estimates of the technical support for agricultural production and the basic final indicators of its development up to the year 1995.¹¹ According to estimates, there will be no quantitative growth of the production or the fleet of the main kinds of agricultural equipment. At the same time the tendency toward increase of the total capacity of the technical equipment that is used and other qualitative indicators will be clearly manifested. The growth rates of the technical support for agricultural production are to be fairly high: the total capacity of the fleet of agricultural technical equipment should double. Since the output of tractors and other agricultural machines will not increase, the basic direction for the development of the fleet will be to increase the unit capacity of the technical equipment and the efficiency factor of the engines, and to increase the time periods of their utilization through improving the conditions for operating, caring for and storing them. The proposed increase in the average capacities of tractors is fairly high—approximately 15 percent every 5 years. This tendency is fairly stable over the course of many years and is confirmed by the figures from the current five-year plan. Thus while in 1980 the average capacity of a tractor used in agriculture was 75 horsepower, in 1983 it was 85 horsepower,¹² that is, it increased by 14 percent. In addition to this there will be improvement of the structure of machines and equipment as a result of deepening of specialization, more extensive application of small equipment, and so forth. One should take into account that the planted areas will apparently not increase. Therefore the effective intensive factors will be strengthened and an important role will be played by improvement of the structure of the planted areas as a result of increasing the proportion of more productive crops with a larger content of nutritive substances and expanding the areas planted in feed crops and irrigated land. The energy availability for agricultural production, according to estimates, will increase 1.5-2-fold during the 15-year period. An analysis shows also the existence of a statistical dependency between the increased supply for agricultural production and the productivity of the main crops. The closest dependency is between productivity and the energy availability of agricultural production, where the coefficient of correlation is the highest.

Thus one can see the possibility of predicting the dynamics of the effectiveness of agricultural production, productivity, production cost and labor-intensiveness of the cultivation of the most important crops. And, conversely, on the basis of the productivity one can estimate the required fleet of machines and the level of technical support and service for agricultural production, and thus determine the capital investments.

The restructuring of the management of the agroindustrial complex and the creation of the USSR Gosagroprom presuppose a policy of capital investments in one or another branch of the agroindustrial complex that will make it possible to achieve the greatest effectiveness of agricultural production, productivity and so forth. This approach will contribute to selecting the most efficient areas for capital investments, coordinating the plans for the development of the branches and productions of the agroindustrial complex, and achieving unified final indicators.

FOOTNOTES

1. "The USSR National Economy in 1980," Moscow, "Statistika," 1981, p 252.
2. Ibid., p 207.
3. Kudrin, B. I., "Scientific and Technical Progress and the Formation of Technocoenosis," ENO, No 8, 1980, pp 15-28.
4. Ksenevich, I. P., "New Technical Equipment: Problems of Creation and Production," TRAKTOR I SELKHOZMASHINY, No 3, 1982, pp 4-5.
5. Ksenevich, I. P., "Branch Science: Its Role and Position in the Acceleration of Scientific and Technical Progress," TRAKTOR I SELKHOZMASHINY, No 10, 1982, pp 2-3.
6. Konkin, Yu., "On the Material and Technical Basis of the Agricultural Industry," KOMMUNIST, No 18, 1984, p 57.
7. Pavlov, B. V., "Povysheniye effektivnosti ispolzovaniya selskokhozyaystvennoy tekhniki" [Increasing the Effectiveness of the Utilization of Agricultural Equipment], Moscow, "Znaniye", 1982.
8. Ksenevich, I., Chukhchin, N., Rotenberg, V., "Reducing the Material-Intensiveness of Machines," PLANOVYE KHOZYAYSTVO, No 11, 1984, p 83.
9. See: Vorotnikov, A., "A Pyramid on Caterpillar Treads," PRAVDA, 18 March 1983.
10. Konkin, Yu., op. cit., p 59.
11. Calculations of the predictions were made according to programs developed by A. B. Mavrin.
12. Konkin, Yu., "On the Material and Technical Basis of the Agricultural Industry," p 58.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

CHANGES IN AGRICULTURAL EQUIPMENT EXAMINED

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (EPP) in Russian No 9, Sep 86 pp 106-111

[Article by V. V. Shlykov, economist (Podorozhnoye, Kherson Oblast): "Tractors, Combines and Indicators"]

[Text] Have you had occasion to be in the cab of a Niva or Kolos grain combine during harvesting season? The working conditions for the grain harvesters are still difficult, and it is not without reason that journalists call this a "battle for grain." And yet they have developed combines that provide for normal sanitary and hygienic working conditions for the combine operators. But the cost of such a cab considerably exceeds the production cost of the combine. Therefore, in the modernized Kolos SK-6 PA combine from the Taganrog Combine Plant they have limited themselves to installing tinted glass and increasing the productivity of the ventilation equipment. Because a comfortable cab will hardly be installed on the initiative of the combine builders until they begin to produce combines that are more productive, the economic effect from whose introduction will cover the additional expenditures on the manufacture of the cab. Even with the introduction of the standard with the corresponding specifications this problem will not be resolved today.

And yet during the 1984 harvest 800 combines stood idle in Kherson Oblast alone because of the lack of combine operators. Measures are now being taken to train an additional contingent of specialists to work on combines, but a skilled combine operator cannot be trained during a year if only because when he receives a combine from the plant the experienced combine operator begins to work as a welder: it is necessary to reinforce and reweld certain things, and sometimes it is necessary to change things on the basis of experience from preceding years. For example, on the combine there is a part called a "lacerator fan," for which even plant representatives will give the machine operators recommendations as to how to change it so that it will work reliably. But the plant continues to make them without any changes.

While in a meeting of the aktiv of workers of the USSR Goskonselkhoztehnika held in Moscow on 19-20 March 1981 it was stated that the annual amounts of idle time of tractors because of technical and organizational factors on the kolkhozes and sovkhozes amount to 12 to 14 percent of the annual supply of working time, in 1984 in the Ukrainian SSR, according to data of

UkrSelkhoztekhnika, the idle time caused by technical factors increased to 17 percent.

The article by Goskomselkhoztekhnika Deputy Chairman V. I. Chernolivanov, gives the following data: "In 1983 268,400 tractors (standard) or 22 percent of the entire fleet, did not participate in the work, including 155,000 (13 percent) because of technical malfunctions (in the Northern, Northwestern, Central, Volgo-Vyatka and Northern Caucasian regions of the RSFSR—13-25 percent of the overall number of tractor-days worked)." As we can see, idle time on technical equipment is increasing both because of organizational and because of technical factors. The elimination of just above-normative idle time because of technical factors would be tantamount to increasing the deliveries of tractors by 83 percent. But to do this, in addition to increasing the reliability of the machines, it is necessary to observe the rules of operation and technical servicing and to improve the repair system.

A typical situation with technical servicing of agricultural equipment was described by N. Golovin: "Not a single tractor was stopped before the beginning of work to conduct the seasonal maintenance. And the machine operators do not even have an idea of what monthly technical servicing is." We are learning that this is not the only thing they have no idea about. "Can you really use spare parts if there is no preventive maintenance and if the machine operator is not compelled to observe technological discipline," Comrade Golovin complains further.² Yet above-normative supplies of spare parts are ineradicable and even during the warranty period of operation the technical equipment stands idle because of the lack of them.

What is the basis for drawing up the plan for the output of spare parts? A summary order from Selkhoztekhnika drawn upon the basis of orders from the farms which, in turn, draw theirs up on the basis of a certain amount of experience (and this experience suggests: "If you need a ruble ask for 10! You will have a greater chance of obtaining a ruble.") Yet the speed of wearing out of parts is a variable amount and if the laws by which it changes are not known to the manufacturer who conducts the service life test then who does know them? In practice it turns out that we ask the engineers of the farms in order to remove the responsibility from ourselves. And who would be surprised to see the following sight in the rural areas: a T-150K and an MTZ-80 playfully pulling a cart with the same cargo capacity! The plan for tractors and the plan for carts are fulfilled, but the high-powered tractors whose share of the deliveries has reached 32.4 percent are not provided with the necessary assortment of implements and supplies.

We can see how the lack of balance of the production of agricultural equipment, spare parts and implements to be used with it leads to a waste of labor, energy and material resources.

It is unfair to accuse just the engineering services of the farms of all the violations of the rules of operation and technical servicing if only because there is no unified set of methods here. UkrSelkhoztekhnika publicizes accounting for the output of machines in terms of expended fuel.³ GOSNITI thinks that translating motor hours into the quantity of fuel expended with a small cargo for the tractor leads to gross violations of the intervals for

technical servicing.⁴ The Kharkov Plant for Tractor Engines thinks that following the recommendations of the GOSNITI can lead to the breakdown of engines of the SMD type.

The quantity and assortment of oils delivered to the farms are inadequate for carrying out technical servicing completely and the technical base leaves something to be desired. The imbalance of the plans has led to an increase in the expenditures on maintenance and operation of technical equipment and to a reduction of its output.

Attention is drawn to one other aspect. The optimal time period for harvesting grain crops has been determined as 10 days. Consequently, a combine belonging to a farm should operate optimally in harvesting for 10 days a year. It is better for the farms if this period is shorter—the losses decrease. And for the national economy? Possibly transferring the combines from the Ukraine to Kazakhstan, as was done earlier, is inexpedient at the present time, especially if one takes into account the bad roads and the immense expanses of our country. But perhaps if the harvest were to begin with the entire fleet of machines in the regions (farms) where the crops ripen earlier, and they were gradually to move where the ripening begins later? This would still make it possible to reduce the time periods for harvesting ripe crops and with the same fleet of machines in the region, and also to increase the effectiveness of the utilization of combines and other machines.

The reorientation of the economic mechanism toward complete, comprehensive accounting for the criteria of consumer values of the agroindustrial complex consists in that industry should deliver agriculture not machines, equipment, supplies, spare parts, fuel and lubricants, and so forth as such, but services. Including services for training and retraining personnel to work on machines that have been placed in production—first and foremost.

Under the conditions of the agroindustrial complex of industry it is expedient to be oriented toward technological support for the production and processing of particular agricultural products in particular volumes, according to known technologies, in known areas, with known climatic conditions, and for conducting technological preparation of production of agricultural products according to progressive technologists. Who if not industry will bear responsibility for providing agriculture with a set of technical means for performing a particular technological process and along with the operators and repair workers be responsible for the serviceability during the entire period of operation!

When carrying out a technological process of agricultural production in full volume and within optimal time periods we obtain an increase in the production of foodstuffs with the reduction of expenditures on production. And this will mean real profit for everyone, which can be distributed depending on the contribution of each partner. The volume indicators in this stage are quite suitable and it is quite necessary to proceed from them. In my opinion it would be expedient to make them the main fund-forming indicators when evaluating the work not only of the farms, but also the branches that are working for technical support for the production of foodstuffs. The national economy needs not technical means as such in the largest possible volume, but

means of production for performing a particular kind of work with a particular productivity and means which will perform these functions throughout the entire period of operation.

FOOTNOTES

1. Chernoiivanov, V. I., "Increasing the Effectiveness of the Utilization of High-Powered Tractors. Scientific and Technical Information Collection," TsNIIITEI of the USSR Goskomselkhoztekhnika, 1985, Issue 1, p 1.
2. Golovin, N., "When There Is No Agreement," SELSKAYA ZHIZN, 16 November 1984.
3. Vasilchuk, S., "Ekonomiya pochinyetsya z naftoskladu," MEKHANIZATSIYA SILSKOGO GOSPODARSTVA, No 6, 1984, p 9.
4. Recommendations for Planned Technical Servicing of High-Powered Tractors and Technical Service Stations for Tractors of the Rayon Selkhoztekhnika Association in the Nonchernozem Zone of the RSFSR, Moscow, GOSNITI, 1977, pp 9-10.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

READERS RESPOND TO SOCIOLOGY ARTICLE

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 112-121

[Survey of responses to the article by Academician T. I. Zaslavskaya, "Economics Through the Prism of Sociology," EKO, No 7, 1985: "Economic Sociology—The Interest of Each"]

[Text] We need to take a new look at the further development of the social sphere and fully evaluate its ever increasing significance.... Lessons of the past require that we pay more attention to social issues," it said in the political report of the CPSU Central Committee at the 27th Party Congress.

The article by T. I. Zaslavskaya contains the idea that economic problems cannot be solved without taking into account the interests of various groups of the population. An attempt was made to reveal these groups, to figure out their behavior, and to explain their influence of socioeconomic progress. "We need a well-thought-out social strategy that is capable, on the one hand, of consolidating the groups that are actually interested in intensification of the economy and the corresponding restructuring of management methods and, on the other, to block the actions of groups that are inclined to impede the solution to crucial problems"—such was one of the conclusions of the article. At the same time it affirmed the usefulness of the development of a new scientific branch—economic sociology.

EKO readers and also the authors of letters addressed personally to T. I. Zaslavskaya contained many interesting ideas and proposals regarding this magazine article.

How To Take the First Steps?

With the great urgency of the subject the author was unable to reveal all the problems, especially regarding social differentiation in our society. In my opinion, the reason for this differentiation consists in that the individual does not feel that he is the master and economic regulation of the interests of various groups is imperfect. "Little is said about this since, apparently, the magazine is avoiding a heated debate," thinks the physician V. N. Kozlov (Birobidzhan).

As Candidate of Technical Sciences I. A. Domoratskiy (Leningrad) writes, the contradictions between social groups are not class contradictions, but in our society there is a battle of the type "mine and ours" within the framework of a single class. The article does not indicate the main interest of certain groups of the society—income from shortages. I. A. Domoratskiy is inclined to see in departmental management and conservatism one general basis—the lack of desire to take responsibility. He places bureaucracy in the same category—"the unwillingness to create in order not to be responsible for what is created." He suggests "closing our eyes to all other trivia" since, as T. I. Zaslavskaya wrote, there is a skilled and energetic part of the personnel who are striving for complete self-realization and labor and who act as the main social force for improving economic relations.

"The article does a good job of singling out the social groups," writes the scientific association S. S. Pokrovskiy (Obninsk, Kaluga Oblast), "to some scientific and technical progress is advantageous and interesting, and to others it is dangerous. Some must support it, others must block it. This is very well, but who will support it? Who will block it? It can be blocked by a group that has a great deal of administrative and managerial influence. How will the battle proceed? With whose forces?"

Candidate of Technical Sciences G. P. Chermenskiy (Khmelnitskiy) was not satisfied with the indicators presented in the article whereby one could judge the interests of the social groups, and ask the following: the climate, comfort, the achievements of the civilization, the desire to work, the attraction to romanticism, moral satisfaction and age. He does not agree with the author's idea that "the majority of social groups now have the opportunity to select between hard work which provides increased earnings and limited participation in public production with average earnings." According to the observations of G. P. Chermenskiy, on the contrary, many groups (engineering and technical personnel, employees, workers) are experiencing a stronger desire for higher earnings, but with work that is not as hard.

The article was read with great interest by A. P. Polovinkin, deputy chief of the Gosbank Division (Leningrad), but he considered the problems raised in it to be secondary as compared to the problems of selecting managers of the interdepartmental level of management, increasing the demands made on subordinates, and selecting personnel without fear of increased turnover. True, he wrote about how one can solve such problems without changing the economic management and social policy.

Without denying the crucial nature and usefulness of the article, Engineer Yu. A. Aranyan (Engels) reproaches the author for insufficient attention to these problems: how to change the existing situation and improve administrative management. His opinion on the need to increase the development of concrete proposals is shared by V.M. Lutskovskiy, senior scientific associate (Kharkov).

V. Ye. Novikov (Saratov), on the contrary, finds in the article recommendations which can be utilized in practical guidance of the national economy. He is irritated by the abundance of formulas for improving the economy in many articles whose authors, in his opinion, do not think about how to influence those who are to use these formulas in practice.

Engineer A. S. Teletov (Sumy) suggests concrete measures for achieving a social effect: (1) improve the quality of the training of specialists by reducing admissions to tekhnikums and VUZes; (2) expand production and construct new enterprises only in cities with populations of more than 1 million; (3) place the center and the periphery in approximately equal conditions with respect to the supply of industrial goods and foodstuffs.

Another opponent of the author of the article, Candidate of Technical Sciences S. A. Kalinin (Gorkiy Oblast), doubts that a new branch of science—economic sociology—will achieve any concrete results and he also doubts that sociologists should deal with moral problems of the economy. He suggests a concrete subject which sociologists should study—the domination of functional services that impede working even in a scientific research institute, not to mention industrial enterprises.

The bookkeeper A. N. Balashevich (Leningrad) includes among the omissions of the author and the editors the fact that it is still unclear how to increase "the number of those who are working at peak performance and frequently desire a promotion." He associates this increase with the utilization of mainly administrative methods. In his opinion, the lack of moral comfort and psychological independence are the main reasons for turnover and the shortage of the labor force, and the lack of development of economic factors indicated in the article are secondary phenomena.

Candidate of Economic Sciences V. I. Palyvoda (Kiev) does not share the author's optimism concerning the growth of the independence of the enterprises. He calls this optimism "excessive" and predicts that the "dictatorship" of the ministries and departments will be replaced by the "tutelage" of local agencies. "One cannot agree with many points in the article which have long been in need not so much of discussion as the most rapid realization," writes Candidate of Philosophical Sciences V. L. Mertsalov (Pyatigorsk, Stavropol Kray). "At the same time there are questionable aspects. For example, the idea of the random nature of people's behavior and the planned nature of the development of the national economy. The plan is a program for organizing random production. But its directive nature is certainly not an alternative to randomness. The directive nature stands in contradiction to economic independence, self-organization and self-management. It reduces the economic awareness of the producer and contributes to retaining the randomness. This is eloquently shown by the large volumes of products which nobody needs, the so-called 'unmarketable goods.' And the producer must be controlled not so much administratively and from above (by the ministry), but the by the consumer of his products.... Providing people with all the information they need when selecting their behavior will make their behavior more deliberate. An administrative coercion of people is fraught with "cruder," incomplete utilization of information in many cases serves as an impediment to the development of the national economy."

Responses to the article by T. I. Zaslavskaya from our experts V. K. Kwartovkin, Polytechnical Institute docent (Chelyabinsk); S. M. Balanovskiy, division chief of the Vostok Association (Omsk); the engineer V. T. Kozhanov (Volzhsk, Mary ASSR); G. A. Voropayeva, candidate of economic sciences

(Minsk); the designer A. A. Derevoyedov (Zhitomir); L. A. Valdman, senior economist at the Scientific Research Institute (Moscow), and S. A. Kozlovskiy, Polytechnical Institute assistant (Lvov) call for concrete proposals for concrete actions and for immediate introduction of the results of economic sociology into management practice. Concerning this we note that T. I. Zaslavskaya's article states quite clearly that economic sociology is now only taking its first steps.

Therefore time is needed in order to raise and consider problems, to accumulate information, and to go through other cycles of scientific work.

"Problems Awaiting Solutions"

The article entitled "Economics Through the Prism of Sociology" was read with a great deal of interest by workers of industrial enterprises. Attention is drawn to the letter by Yu. A. Degtyarev from the city of Yermak in Pavlodar Oblast:

"The author has shown quite graphically and convincingly that without which our economics simply does not have the right to exist as a science. Although this is not discussed directly, one cannot escape this conclusion. Perhaps such a reaction is inherent in more than just the engineering contingent of the readers. Many engineers who are not indifferent to their work have for years accumulated confusion, concern and painful memories. A human protest has grown up against certain "scientific" substantiations and recommendations of economists, against extremely doubtful economic plans and their implementation. I shall give only a couple: the elimination of the 'unpromising' villages, the megalomania in construction, the abundance of wine and liquor and much else has become possible because professional economists, especially in branch institutes, completely ignore the social consequences of their decisions. Perhaps someone will remember the article by T. I. Zaslavskaya as simple commentary to the statements of the classics. But as I can tell in my own scientific production association, the majority perceive this as a protest against the many years of being silent and ignoring the most important elements of scientific theory."

The engineer S. G. Mikheyev (Minsk) after he had read the article, began to think about his own role in public organization of labor. But, not having found one, he thought that he himself could be included in some group according to the "second indicator" for the definition of social groups—relation to means of production. "But I do not see any changes for the better, and a frontal attack or diplomatic sallies are pointless." We understood this to mean that S. G. Mikheyev does not feel that he is the owner of the means of production and, consequently, doesn't see any possibilities of utilizing them effectively. "The time wears one down although in words everyone is in favor of my having in practice a direct relationship to the means of production."

The pensioner Ye. N. Berkovich supports the author in the idea that the influence of group interests, which are frequently negative, on the destiny of the economy is too great and unless group interests are taken into account it will be difficult to break down the outdated economic mechanism and open up a

wide space for production forces and the fulfillment of the most important decisions made recently.

The article enabled the engineer-mechanic Ye. V. Kabanov to see and understand better the processes taking place in the society. It seems to him that it consolidates the groups that are actually interested in the development of the economy and gives many a competence in the correctness of their decisions and, in the final analysis, will help in restructuring the economy.

An information computer center chief V. P. Zaytsev (Solikamsk) was especially drawn to that part of the article which discusses the superfluous levels of management of the national economy. He emphasized that these levels cause an immense amount of harm to the economy and on the whole he supported the author in the idea that the social aspects of management urgently require immediate restructuring.

In the words of Yu. V. Zholobova, senior VUZ instructor (Saratov), those problems written about in the article by T. I. Zaslavskaya are a neglected area of the theory of socialist management. It seems to him that the category "interests" should be transformed into a working element of the economic mechanism, but the term "group interests" is poorly defined against the background of other terms and concepts.

Candidate of Economic Sciences A. M. Ilyshev (Kharkov), notes the innovative nature of the article and especially singles out the sections entitled "How Interests Are Determined" and "The Social Mechanism for Improving Production Relations." A. M. Ilyshev's own experience confirms the fact that economic sociology is indeed capable of casting additional light on the processes of social development. The placement of economic and social priorities, in his opinion, is a necessary step, but only the first one. It is already necessary to speak about qualitative commensurability of economic and social expenditures and results.

A. N. Gladkov, chief of Mine Planning and Economics Division (Inta Komi ASSR), was especially drawn to the section entitled "The Social Mechanism for Improving Production Relations." From his standpoint, in the past three five-year plans new production relations have taken form, in which he sees the root of the majority of problems of economic and social life. A. N. Gladkov calls for the development of fundamental research which will help to answer the question of what kind of social mechanism can provide for improvement of production relations.

Quoting such lines from the article as "...the real development of production relations takes place not only and not so much as a result of the occupational activity of workers especially employed in this as in the complex process of interaction of socioeconomic groups which hold various positions," Candidate of Economic Sciences G. Ye. Davydov (Mytishchi, Moscow Oblast) perceives the existence of an objective basis for these relations.

N.V. Lagunova, senior economist (Moscow), suggests using economic sociology to establish an optimal ratio between existing methods of managing the economy, dividing them into the largest categories of administrative and economic.

B. F. Danilov, chief of the Orenburgneft NIS (Buzuluk, Orenburg Oblast) calls for reducing the staff of associations, departments and ministries to one-half to one-third their current size. He wrote about the inadequate amount of attention paid to social problems, as a result of which the workers frequently do not see the results of their labor.

"The article makes a gripping impression. It forces one to take a different attitude toward social processes in our society"—such is the evaluation of the engineer V. I. Didenko (Voronezh). "We were taught something different in the school, the VUZ and in lectures. The author takes a serious look at today's reality and the role of the human factor in the management mechanism of the economy. The article directs one toward effective and decisive measures against negative phenomena."

The engineer V. D. Korobov (Kursk) sees economic sociology as a serious scientific discipline. "The social development of the society is policy," he writes. "And policy should always prevail over the economy, that is, any economic decisions should be regarded through the social interests of the society."

According to the observations of Yu. M. Nadolnyy, junior scientific associate of the Scientific Research Institute (Minsk), a number of problems raised in the article have deliberately not been discussed in economic and sociological literature because of how crucial they are. These problems acquire special significance in his opinion, in light of the new party strategy which is directed toward acceleration of the country's socioeconomic development.

And to conclude this section of the survey let us present the words of Yu. V. Yegorov, engineer-psychologist (Leningrad): "The article is devoted to an exceptionally important social aspect of managerial and economic relations, and it calls for all-around restraint and farsightedness in controlling today's changes in economic and social life.... Crucial problems are sketched expressively and in a new way: the relationship between administrative and economic regulation of production activity and the interconnection between the economic and social aspects of managerial restructuring."

What Next?

Many authors of letters insist on continuing the discussion of the problems written about by T. I. Zaslavskaya in a "deep and serious discussion of this subject," as V. A. Lisiynko, group chief of the Scientific Research Institute (Moscow), wrote. The work of economist-sociologists is regarded by many readers as fruitful and useful. And certain responses suggest how they should work in the future and express the desire for the editorial staff to show the development of economic sociology. Thus, in the opinion of Candidate of Technical Sciences G. P. Chernenskiy (Khmelnitskiy), the questions raised at the beginning of the article were only partially answered. "There was a convincing and detailed analysis of the behavior of people who influence the formation, distribution and utilization of labor resources," he writes. "But the other aspects were not elucidated. No answer was given to the question: 'What determines the interests?' There was no analysis of such problems as

the outflow of population from rural areas and the interests of agricultural workers, although they exert an immense influence on the life of the country."

"The article emphasizes the great changes which have taken place in economic science since the fairly severe criticism of it at the June (1983) Plenum of the CPSU Central Committee and shows that economic science can produce an immense advantage for real life," writes the engineer B. V. Kartsev (Gus-Khrustal'nyy, Vladimir Oblast). "The conclusions in the article can be used in practice even now and there is no fear that the research of economic sociologist will lead to empty results."

A continuation of the subject, in the opinion of V. I. Kashin, candidate of medical sciences (Voronezh), consists in strengthening the labor activity of the workers with the help of public consumption funds, and providing incentive for improving people's health and ability to work on the basis of self-fitness, which is also of considerable importance for the development of the country's economy.

The engineer S. I. Papshev (Brest), discussing the fact that he had never read anything of the kind before, suggests that economic sociologists consider a broader range of issues in economic and social life in the country and abroad. He is a sociologist himself and thinks that a synthesis of industrial (concrete) and economic sociology can produce effective results.

The engineer V. T. Kozhanov (Volzhsk, Mary ASSR) would like to see materials concerning the initial actions that are actually taken by economic sociologists. He considers it necessary to write not only about what is indisputable and axiomatic, but also about what is debatable.

The senior engineer of the Promsvyaz Plant, L. P. Freyzynger (Odessa) sees the development of the subject and concrete solutions to certain problems raised by T. I. Zaslavskaya in the need to "slow down" urbanization and create an entire system of small peripheral enterprises as is taking place in many other countries.

"The last word has not been said. The conclusions in the article are unambiguous, clear and scientific. But one must continue the discussion of these problems, for example, with the help of I. V. Bestuzheva-Lada, whose article I liked very much," writes L. S. Galanin, director of the UPK (Medvezhyegorsk, Karelia).

After Candidate of Economic Sciences V. I. Palyvody (Kiev) read the article one question remained unclear: Why does class interest take a back seat to group interest, and where are the levels of effective utilization of group interests for achieving nationwide goals?

And, finally, engineer Yu. V. Yegorov (Leningrad) suggests for completeness and practical direction for the new science including also in its sphere an analysis of the interaction of social and economic aspects at the lower levels of management: enterprise—brigade....

How can this be done in practice? It seems to us that the letter by head engineer V. A. Anikin (Moscow) is a kind of answer:

"The retardation of the development of the economy can be explained in no other way than by the resistance of particular social groups. Why is it that for decades, in spite of an entire complex of initiatives, the 'live energy of the masses' has not been able to make a way for itself into the so-called lower-level cost accounting, for example, in the form of youth introduction firms or the Shchekino Method? And why do we utilize worker initiative so poorly? This is clearly creative 'unemployment' for which we must create 'work positions.' This 'unemployment' suits the administration of the associations and enterprises, and also the 'extraorganizational' part of the labor collectives, and, finally, the simply inert part of them. Their personal interests are satisfied and they diverge from the interests of the inventors, innovators, and enterprising people who have initiative.

"This does not mean that it is necessary to eliminate these groups that are impeding progress. We cannot do without their services, but they must be oriented at least minimally to our growth. The experience of Hungary and Abashskiy Rayon in Georgia convincingly show that the "managerial object" appears when a course is taken toward combining the capabilities of the enterprises and organizations with the interests and personal capabilities of the rank-and-file, but enterprising workers. For example, on a contractual basis both the farmstead plot and the private time of the worker are regarded as something analogous to the capital and supply of time of a state organization. Of course, without detriment to the interests of this worker. One can speak both about a little small store and about a technical innovation. About one worker, family, or best of all, a friendly group.... Without changing the ratio between administrative and economic methods of management one can augment them with new cooperative forms of work."

The editorial staff and the article of the author entitled "Economics Through the Prism of Sociology," Academician T. I. Zaslavskaya, thank the readers and the magazine's supernumerary reviewers for a detailed discussion of the article and for their critical remarks and suggestions. This will help to establish economic sociology and expand its influence on situations in the country's economic and social life. Of course, not all of the suggestions of the readers as representatives of a new direction in science can be realized "immediately." Some of them will take a good deal of time.

The desire of the readers to continue the discussion of economic sociology and the problems that will be resolved by this science can be regarded as satisfied to a certain degree since T. I. Zaslavskaya has prepared another article entitled "The Creative Activity of the Masses: Social Reserves for Growth" (EKO, No 3, 1986).

It seems to us that economic sociology will make its contribution to the achievement of one of the program goals of the CPSU—changing over to an economy with mature socialist production relations. And we wish to recall the following words from the "Resolution of the 27th Congress of the Communist Party of the Soviet Union concerning the political report of the CPSU Central Committee":

"The Congress attaches primary significance to conducting an active, integrated social policy.... It is necessary to decisively turn management and planning agencies in the direction of the needs of the social sphere and completely surmount the underestimation of the crucial problems here.... The party will strictly follow the principle of social justice and persistently work to eliminate everything that impedes its unwavering implementation."

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

RESPONSE MADE TO HOUSING CONSTRUCTION SUGGESTION

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (ENO) in Russian No 9, Sep 86 pp 122-127

[Article by V. A. Belichenko, docent of the faculty of construction production technology of the Kherson Agricultural Institute: "What Should the 'Second Wave' Be for the Residential Building?"]

[Text] Not Everything Is as Simple as It Seems

The suggestion of architect-engineer A. S. Iadinskiy¹ concerning the organization of a so-called second wave in housing construction "using funds of developers and with their mandatory participation in the production of construction materials, parts and in the construction of the building itself" seems quite timely, sensible and tempting. It includes significant reserves for an accelerated solution to the housing problem, and not only in the cities, but also in the rural areas.

But not everything is as simple as it may seem. It will be necessary to overcome quite a few ingrained opinions, customs and deceptions before the "second wave" gathers force. Of course, if it helps to increase the volume of housing construction 1.5-2-fold, it is worth it. But, as the author asserts, "the state does not have the support for this: neither material nor human resources." The obvious conclusion is that for these resources the state should use what it has not already put to work. These could be local resources, of which there are an abundance, and traditional construction materials for a given region, and also working hands which are able to work with these materials and construct their own individual housing during hours when they are not at work. Such resources exist in any region of the country.

In recent years many plans have been created for individual residential buildings. All of them are oriented toward construction through the efforts of construction organizations and therefore they take advantage of the latest, most progressive materials, frequently ones which have not even gone into mass production, and yet the local construction materials have been undeservedly forgotten. Yet there are not many of them. These include reed mats and slabs firmly joined together, bundles of straw and brushwood, adobe and straw and clay mixtures, broken and sawn, bellrock, boiler and household slag, ashes from thermoelectric power stations, lime used as a binding material and in

forested regions—wood. In combination with a durable, small frame and modern finishing materials, they can serve the "second wave" well for many many years. Incidentally, their application will significantly facilitate the enlistment of additional labor force since all of the adult population of a given region is usually able to work with these materials.

Our irrepressible desire to crowd all construction without exception into the bed of Procrustes of standard plans can also create many problems in the organization of the "second wave." With stubbornness that could be used better elsewhere, we even try to squeeze a garden shack into the framework of standard solutions. For some reason it is thought that the standard plan is inexpensive. Of course if the little buildings were manufactured on a conveyor and delivered in a set that was completely ready from the plant and then assembled at the site in 2-3 days, they would be much less expensive than individual ones. But, after all, this is not the case yet. As concerns a farmstead building, when it is constructed according to a standard plan it simply cannot be individual—it is the ordinary "consumer good" and it is not very convenient and it is fairly expensive.

A standard plan means a standard building, and this means typical standard layout, standard elements manufactured at the plant, and costly industrial materials. And here a residential building which is called individual costs only 20,000 rubles, and a garden shack—about 5,000 rubles. Here there is no room for creativity, searching for reserves, there is no room for local construction materials, the standard plan does not take into account local peculiarities and age-old national traditions—there is no place for creativity, that creativity which construction has represented throughout the ages among all peoples.

Unfortunately, the planners and builders are increasingly taking a negligent attitude not only toward regional, but sometimes even national traditions in the construction of individual housing. But what a pity! In the article entitled "Traditions incentives for development" (LENINGRADSKAYA PANORAMA, No 5, 1983) it was emphasized: "Everything the Russian created was created beautifully and with his soul, it was warmed by his individuality. Beginning with implements of labor and daily use and ending with cathedrals, he did everything not simply from a utilitarian standpoint, but necessarily with embellishment." Convenience, durability and beauty have always constituted the underlying foundation of architecture, but they are especially important for structures of the "second wave." They are important because they can be achieved only through creative labor—the labor that man is willing to give even after a hard day at work.

In his report at the April (1985) Plenum of the CPSU Central Committee General Secretary of the CPSU Central Committee M. S. Gorbachev noted that "...it is important to continue in the future to increase our efforts in solving such a social problem as housing so that in the future it will be possible to provide each family with an individual apartment or well-constructed house."

A person who expends his labor and money on the construction of housing can choose what he wants—an individual apartment or a well-constructed house. Obviously both should be accommodated in the "second wave."

Housing for Man Is Not Merely an Apartment

The housing that will be constructed for the "second wave" is a special kind of housing. It is special not only because it will be constructed at the expense of the residents themselves and through their efforts, not only because it should completely satisfy their social and aesthetic requirements, and not only because it should be fairly well constructed and not too costly, but also because in the future it will become for us the kind of housing to which we shall repeatedly return in our memories once we have left it in youth. We shall return in order to gather strength for struggling with the trials and tribulations of life and, perhaps, it will also be necessary to return in order to live out the rest of our days there. Having become involved in solving the housing problem and satisfying man's needs for housing, we have somehow forgotten about this peculiarity of our housing.

For each of us the homeland begins with the home in which we were born and grew up, the home that was cared for and fixed up by our father, where comfort and well-being were maintained by Mother, to which as we grow older we are more and more drawn by the possibility of being with our grandchildren. In spite of all the improvement in transportation, it is costly to go and come from them and each year it is more and more difficult, and at the same time it is so necessary, for if the children's voices die out in the home diseases take a strong hold there.

Are there simple joys in moving to the individual apartment toward which we strove in youth? Of course, the apartment is the base, this is the independence, the indicator of success in life. But at the same time this apartment tore us away from our friends and relatives, left our children without grandparents, deprived us of the joy of conversation at the family table, reduced communication with neighbors to a minimum, and left us in isolated loneliness. There is no doubt that an isolated apartment is in general better than none and it is better than a communal one, but it is certainly not the ultimate of our dreams, for the sake of which people are ready to expend both their savings and their labor after their regular workday.

It would seem that A. S. Ladinskiy is wrong in not having anything to do with "single-apartment buildings of a rural type." For they are the ones most suitable for the "second wave," since they make it possible to successfully utilize local construction materials, to mobilize large reserves of labor force, and to open up a broad space for individual creativity and development with a readiness to take on the functions of a paternal home. This pertains to the assertion that "the construction of these buildings will create serious new difficulties" and that the losses of heat will increase in them, for technicians and specialists are aware of a multitude of ways of avoiding these. The duplex fits fairly well into the requirements of the "second wave." As for the fourplex, there is a certain amount of doubt about its expediency. The fact is that such a building must inevitably have two stories and this requires heavy floors between the story and a middle wall, it will make other elements of the building heavier, cranes will be required to assemble it and, in the final analysis, the construction of the building will

return to the "first wave." But we should not reject fourplexes as categorically as A. S. Iadinskiy did as compared to single units. Apparently, it would be expedient to build single units, duplexes and fourplexes altogether. The latter could be used by large families consisting of a family of older people and the families of their children. What is important is not the number of apartments in the building, but their convenience, cost and the possibility of constructing them without enlisting state resources.

...But Who Will Do the Building?

Is there any point in worrying and arguing too much about what kind of building will be constructed in the "second wave"? It is quite obvious that there can only be one opinion here—the building will be in the "second wave" of construction only if we do not use for its construction resources that are intended for housing in the "first wave"—the state sector. Neither material nor human resources. Failure to observe this condition will automatically exclude the building from the "second wave" since we will not obtain any increase in housing construction this way.

This situation, of course, brings about many problems, far from the least being—who will do the construction? And here again it is appropriate to return to tradition. Many nationalities in the recent past, and in some places even today, have had what we think is a fairly good custom. Before allowing his son to get married, the father must build a house for him. And regardless of how many sons he may have, he must construct a house for each of them—except for the youngest, who is left to live with his parents.

For many families this has been an extremely difficult task. But nonetheless they have used all their savings and with the help of family, friends and distant relatives, somehow they have managed to construct the building. They constructed it, as we now say, by the "method of national construction." They began preparing for this event almost from the day the son was born. Whenever they could, little by little, they stored up construction materials, as a rule, local ones; they prepared the plot of land; they looked for an appropriate model (a kind of replacement for today's plan).

When the time came, on some Sunday they would invite a knowledgeable specialist who at one time had constructed the type of building that had been selected, all the family, friends, acquaintances and neighbors, they threw a party, and the entire day they sang songs, but by evening the walls of the house were in place. Within 2-3 weeks after the walls had dried out, they all gathered again, again they sang, again they danced, but by evening the building was ready for the finishing work. Now the young people, either with the help of their parents or by themselves, did the finishing work according to their taste. They finished the building after they had already moved in, each year adding more and more "embellishments." That is how they created the residential buildings which today occupy a worthy place in the museums of national architecture of Kiev, Lvov and other cities of our country.

Perhaps there is some point in resurrecting this custom? And not only resurrecting it, but also developing it so that not only relatives and loved ones, but also the collective in which they work would be included in the

construction of a home for the young people? Let the construction of a home for a young member of the brigade become a brigade labor holiday!

The state could also be included in this construction without detriment to the "first wave"—in the development of standard plans for residential buildings from local construction materials, the allotment of plots of land for the building, and the rendering, if necessary, of material assistance—either to youth or to their parents. This could be a long-term loan at an acceptable interest rate; the sale through retail trade of modern finishing materials—dry plaster, wallpaper, paints and finishing materials; the loan of the necessary mechanisms and instruments for construction, technical assistance in construction and paid consultation on various special problems.

It would seem that some of these functions could be the responsibility of specialized repair and construction organizations created in keeping with the decree of the CPSU Central Committee and the USSR Council of Ministers of 7 March 1985, "On Measures for Developing Services for Repair and Construction of Housing, Structures for Gardening Societies, Garages and Other Buildings on Order From the Population in 1986-1990 and the Period Up to the Year 2000."² They could provide technical supervision, consultation from specialists, and the sale of materials according to the requirements of the plan. Of course, there are only wishes so far. There is not doubt about one thing: the construction of buildings of the farmstead type using the funds and labor of the builders is a crucial problem and its solution should be given an organizational and legal form. The time has indeed come to prepare proposals for individual and cooperative housing construction of the "second wave"—both for the suburbs of large industrial centers and for small cities and villages.

FOOTNOTES

1. A. S. Ladinskiy, "The Building Which Will Be Constructed...by Whom?", EKO, No 2, 1985.
2. Collection of decrees of the government of the Union of Soviet Socialist Republics, Moscow, No 12, 1985.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

SUCCESSFUL BUSINESSMAN'S CAREER SKETCHED

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKO) in Russian No 9, Sep 86 pp 128-144

[Article by Tatyana Boldyreva: "The Lines of Kulagin"]

[Text] He is known and remembered not only in the Leningrad Metallurgical Plant imeni 22nd CPSU Congress, where he worked, and the Leningrad Tool Building Association imeni Sverdlov, where he was general director for 10 years. He is known at other enterprises of Leningrad as well, and also at the Leningrad Finance and Economics Institute imeni N. A. Voznesenskiy where he has taught for the last decade.

But he is also known by reputation to many thousands of people in all corners of the country—readers of central newspapers and magazines on whose pages have frequently appeared articles with the signature: G. A. Kulagin. He has published many times in EKO and the workers of the editorial staff remember him as an excellent conversationalist. The journal has printed his articles, "My Partners, the Leadership and the 'Rules of the Game'" (No 2, 1975), "In Response—A Firm" (No 6, 1977), "Centralized Management Plus the Initiative of the Enterprise" (No 7, 1979), "The Scientific and Technical Revolution: The Reality and the Myth" (No 7, 1981), "The Everyday Life of the Director" (Nos 1-3, 1983) and "The Products List, the Price and Profit" (No 11, 1981).

The last article was published after Georgiy Andreyevich was no longer with us.

From these articles one can see depicted a bright and outstanding individual, an experienced manager, an inquisitive economist, and a progressive businessman who was able to see the turning points in the diverse flow of social life and analyze them so as to understand what could be changed for the better.

The readers could sense this interest in changes reinforced by a large amount of experience of an intelligent and the exceptional capabilities of a leader. Therefore EKO received letters in which people asked for his address in order to share what was bothering them with him as a teacher and a friend. There were many responses to the last article as well....

He left behind him books, which are very similar to conversations, on the most crucial problems of the country's economic and social life. These include: "Diary and Memoirs" (Leningrad, 1978), "The Worker, the Manager, the Scientist" (Moscow, 1976) and "The Everyday Life of the Director" (Moscow, 1984).

He never gave instruction to anyone. He contemplated problems aloud and in writing, sought their solutions and made suggestions. He had the right to speak about what bothered him, not only as a director but also as a machine tool operator, the position with which he began his career many years ago. As though returning to his sources, not long before his death he returned to his first work position—the Kuznetsk Metallurgical Combine—and found his machine tool in the same place, in the same machine shop....

The Higher School of Production

Georgiy Andreyevich Kulagin was born in 1912 in Odessa. After the completing the Taganrog Industrial Tekhnikum he moved to Novokuznetsk. At the KMK he was a foreman and then a shop chief. He served in the Pacific Ocean Fleet.

"The main thing for us, I repeat, was work. During the period of startup of the rolling shop, the bronze rim of a worm wheel broke. We sent a request to the firm and they promised to send us a new one within 2 months. The rim was large, perhaps 30 modules, and it also had multiple threads. The appropriate cutters had never even been mentioned here, and the only gear-cutting machine could cut wheels only for about 20 modules. Naturally, when I managed to cut the rim using a nonstationary cutting implement, I was puffed up with pride for a week. We were not afraid of "rough" work; this is what made it an excellent school of engineering mastery. When we started up the second Komsomolskaya furnace, Ivan Pavlovich Bardin, not yet an academician at that time but simply the head engineer of the combine, staffed it entirely with young engineers and technicians. He was respectful of the American system of training engineers: "The Americans did not simply get ahead—they wore calluses on their brains...."¹

That was how his labor life began. This is also the origin of his attitude toward life in general, toward his main values which subsequently surprised, not to say impressed, many people: "How can a director have neither a car, nor a classy apartment, nor any kind of furniture nor even a desire for all of this?" And this ensued from his positions in life. Work is the main thing in which man can and should manifest himself. The main value.

No, he was not a fanatic nor an ascetic. Such managers are rare, and usually when they go on pension it is the end of their life. Kulagin was not a director of pension age and the concept "work" for him was broader than the concept of "duty." In those days a young engineer who had been placed at a plant or construction site could very firmly stand up for himself if he was offered work which did not correspond to his plans or qualifications, but he never asked: "How much will I be paid?" Of course, then too wages meant a good deal to each of us, but it was simply unseemly to be interested in the amount. The main thing was the nature of the work, and here, once one had proved oneself, it was also possible to argue with the management...."

At the Leningrad Metallurgical Plant where Georgiy Andreyevich worked on and off for 25 years, he made his way through various subdivisions of the enterprise: equipment engineer, head mechanic, chief of the division for capital construction, production chief, deputy head engineer for preparing production.... Various services of the enterprise, various tasks which placed various demands on the individual's capabilities. But it was also a higher school of production.

Here is what Lenin Prize winner E. D. Dolinskiy, who worked along with G. A. Kulagin at the LMZ, has to say:

The main character trait of Georgiy Andreyevich was his ability to handle any situation, to grasp the essence of a problem, and to find a nontraditional approach which could not immediately be seen. I recall a conference regarding one important item. There was no way it would work. The most opposite opinions were expressed, everyone was confused, and no solution was in evidence. The floor was taken over by a youngish engineer from the head mechanic's division, a thin man in a blue jacket with a high collar. He began modestly by saying that he does not know that plant and he had never dealt with the problem. But still he figured it out intelligently, singled out the main thing, and cut away all that was unessential.

As a leader too he was a multifaceted person, he could understand both technical equipment and design peculiarities, and he was an exceptional organizer. He was able to convince others because he was confident in himself. I recall that we made immense units for ships weighing more than 200 tons. It was possible to lift them only with two cranes with capacities of 100 and 150 tons. Understandably, it would have been better to do this with one crane, because two made it complicated. The deputy minister, having learned about this, announced: "How can you solve this problem for yourself? The shop will be shut down if you remove the cranes. This is a question for the board of the ministry!..." Thus a technical problem unexpectedly grew into a management problem. The deputy minister did not know how long it would take to solve it. But Kulagin said: "We already have the calculations. Why wait? Let us try to lift it during the night." Everything was prepared and everyone knew what he had to do. About 3 hours after the 'operation' had been completed, there was a phone call from Moscow: "Who will raise the question before the board?..."

What do we see in this story? Self-importance, self-sufficiency? No, the ability to organize, to prepare, to calculate precisely and, the main thing, to take the responsibility for risk. He was able to make responsible and nonstandard decisions.

These few vignettes from Kulagin's 25-year preparation for being a director clearly show what kind of a professional leader he was. Of course this preparation took a long time according to our standards. But it was fundamental.

The years he spent abroad after the war also provided him with a great deal he could use as a manager. He was the chief of the economics division of the

Soviet unit of the Union Commission in Vienna and participated in developing postwar peace treaties as an expert and an adviser. These years expanded his horizons, enabled him to learn about foreign technical equipment and technology and, perhaps, the main thing, to understand and see the possible diversity of approaches to management. He developed the ability to understand and respect different views and at the same time the ability to find and defend his own opinion.

"Analyzing His Experience..."

Georgiy Andreyevich became the general director of the Machine Tool-Building Association at a time when there were only 10 associations in Leningrad. Before Kulagin came, the first general director "lasted" for a year and a half.

Here is what the deputy general director for production at this association, Ya. N. Chundovskiy, who worked hand in hand with Kulagin for many years, has to say.

The association had been created on paper and the advantages of this kind of management of production had not been felt at all. But there was a very large list of items, with all the outlays that ensue from this. The plans were not being fulfilled regularly, especially for special machine tools.

"What did they expect from a new director, especially in a situation where business was bad? Decisive actions, a change of 'command' of the leaders. But time passed and externally nothing changed. He observed, talked with people, and he especially loved to talk with line managers. He tried to understand the problems of the association. Still he had come from another branch. Machine tool building was more complicated, if only because of the list of items, than energy machine building was. And it seemed that Georgiy Andreyevich was not bothered primarily by technical problems. He found out who and what he was dealing with. Who is capable of what and, the main thing, how to turn these people in the direction of new tasks.

"His first speeches to the collective show that he had gathered a colossal amount of material which enabled him to understand the state of affairs not only in the association and in its plants. He relied on data from unionwide statistics and world experience. In order to reach the world level, he thought that it was necessary to concentrate the efforts of associated plants. Only this would help to solve the strategic problems. One must say that although the first associations had already been created, far from everybody believed in their advantages. And the main thing was that there was no unity in their views: what they should be? A multitude of questions evoked disputes: the boundaries of centralization, economic or legal independence, the organizational structure.

"Kulagin, having evaluated the experience of foreign firms, suggested this line: from numerous profiles and excessive development of auxiliary and procurement shops—to specialization. For excessively large and structurally complicated enterprises it was difficult to be mobile and capable of rapid restructuring, for example, for new items. But how could one develop

specialization if the organizational forms for its development stood in contradiction to the real interests of the enterprises and the ministry?...

"But finding the 'sore spots' and following a line of behavior through these spots is a good deal for a consultant. For a director it is only the beginning. He must convey his confidence to everyone and make all of them his allies. And he must understand the psychology of his subordinates."

Rilagin himself wrote about this situation:

"Each leader of a large collective is familiar with the disturbing sense of an impersonal 'resistance of the environment' to his undertakings, he is familiar with the phenomenon of a kind of 'entropy,' a disintegration of an order that would seem to be firmly established. You have been given power, the means to exercise it, you have a desire and energy, you know what needs to be done, and you do it. But the persistence and stubbornness of the controlled 'system' turns out to be obviously greater than your influence on it as the controller....

"...When analyzing my own experience and the experience of my colleagues I came to the conclusion that the reasons for many failures lie in the fact that many of us do not understand modern conditions for production and overestimate administrative methods of influence....

"Until the desires of the manager become the desires of the majority of his subordinates, he has little chance of success, even when he is carrying out ideally correct and reasonable decisions.

"A well-known tenet of the science of management, which says that the force of an order consists not in what its author wanted to say, but in what the person carrying out the order has understood, becomes especially obvious under the conditions of the socialist system."²

It is no longer possible to recall how many times the new director spoke from the podium, and frequently without it as well, where he spoke and to whom. Everywhere. The group of people with similar ideas expanded. And there were not only people with similar ideas, but people who were ready for action.

Of course many of his speeches were devoted to updating output and other technical and organizational problems. He was not the only one to whom these were obvious at that time. But what was not obvious to many managers at that time and which they did not begin to take seriously until decades later—it was this that was his "leitmotiv." We now designate this with two words—the "human factor."

It was very difficult to realize this factor at that time.

Ya. M. Chudnovskiy recalls:

"Plants that were not at all similar were merged together into the association. The head plant was the renowned old Machine Tool-Building Plant imeni Ya. M. Sverdlov, the former FENIKS. There were the permanent workers,

the native Leningraders, and the largest design bureau, which set the town in machine building. And the former Lenstankolit. When the idea arose to use this enterprise as a base for organizing the output of even more machine tools, they transferred here the heavy slot-cutting machines that had previously had been produced in Gorkiy. They absolutely did not fit in with what the head plant had been intended for. And there was a different collective at Lenstankolit—its skeleton was made up of people from Gorkiy who had just arrived. And it had its own fairly good designers. But how to combine two such different collectives into one? If they were to consistently follow the path of clear-cut specialization and elimination of the diversity of products for which Kulagin had always fought, it would be necessary in general to refuse the nonprofile machine tools that had been sent for Gorkiy and specialize in boring machines. Such was the situation in which the association had to take its 'place in the sun' and also in the world. Kulagin 'pulled out' the slot-cutting machines which were 'alien' to the head plant to use them for export. The Japanese now remember them well: reliable! He 'pulled them out' in order to then reject them. It would seem to be a strange management decision. The direct path would be to reject everything that stands in the way of the association. But Georgiy Andreyevich had a rare feeling for reality and the ability to maintain the 'golden mean,' refraining from things that he knew to be impossible. He himself probably understood that to balance on the boundary between reality and prospects is a complicated matter...."

Today this is reasonable, but tomorrow it might end up in a loss of prospects. And this is probably why in his book "The Daily Life of the Director" one can see a bitter recognition of the fact that the Ivanovo Machine Tool Building Association, which was created as a double of the Leningrad one, turned out to be capable of the highest achievements of machine tool building—automated processing centers and, subsequently, flexible production systems. And the Leningraders were left behind. The actual conditions of the association and the lack of capital investments, alas, turned out to be stronger than Kulagin's confidence. Those reserves which were at the disposal of the collective itself and its director were taken away. But there were also things over which Kulagin had not control—first and foremost, the impossibility of serious restructuring. Even at the metallurgical plant he was known for the fact that regarding any issue he had his own opinion and that he was able to defend this opinion without respect to individuals. Even within the enterprise, if you are not the top manager this can be difficult, but outside the enterprise it is necessary to have exceptional flexibility in defending one's point of view.

A Bird in the Hand or Two in the Bush?

Georgiy Andreyevich was no longer director when the "five-year plan of quality" came along. But even during the years when he was director product quality and the orientation toward the consumer became, as it were, his second professional "hobby."

A confirmation of this is the story of the boring machines. They had been produced for many decades without any design changes. And the machines were considered to be good. Within the country. Outside the country their

precision was considered to be low. But within the association and even outside it they had become accustomed to this degree of precision--and suddenly it had to be increased by 40 percent! The figure was not a random one; the professional organizer of production, along with all of his proponents, had not only to calculate and bring the machine tools up to the so-called world standards, but also to prove all this to the no less qualified specialists, who considered their machine tool to be not simply normal, but good.

Ya. G. Goldin, deputy head designer of the association:

"Georgiy Andreyevich had gone on pension. His approach to machine tool building and program for putting our machine tools on the world market were correct. He was also able to figure out the mass of ideas suggested by world practice. For example, he rejected the idea that was popular at the time that a machine tool with program control was an ordinary machine tool only with meters. Kulagin quickly saw that this was a blind alley: the properties of a universal machine tool were no good here. Our designers were the first in the country to begin to study this. It was under Kulagin that machine tools with program control were put into series production. Moreover, he was clearly not a technical fanatic but he felt quite at home writing in technical journals and could even toss out ideas to seasoned designers who knew everything....

"But Georgiy Andreyevich was a very complicated man. On the one hand, he reported the design 'games' with numerical program control, which led them 10 years ahead. On the other hand, he loved the joke: 'Give the designers their way and they will drive the best firm into a corner.' But, after all, there was a contradiction in the very nature of management: it did not stimulate and advanced technical level or the updating of products. Kulagin always tried to combine both interests."

And as a result of this policy he managed during the 12 years of the association's existence to increase exports 7-fold, bringing them up to 25 percent of the overall volume of production, and in the head plant, which produces heavy machine tools, exports reached one-third. Kulagin took a long time convincing Stankoeksport that it was especially prestigious to sell machine tools. Herds of foreign delegations came to the association. It was demonstrated to them that Soviet machine builders are highly educated, cultured, equal partners who were able to make something that could be sold to foreign firms.

Here too Kulagin saw the "human factor" and wanted to instill in the people a feeling of pride in themselves and the work that they do. He inspired them. He himself wrote about this as follows.

"With the proper approach from the administration and the public organizations of the enterprise it is always possible to find that "spirit," which will help not only to raise the people to great deeds, but also to strengthen their sense of their own worth and to increase their social self-evaluation and satisfaction with their labor and life.

"An especially large amount can be done if one is thoughtful and serious about organizing the work for improving product quality.

"Why, for example, should Skorokhod not take a "nationwide" approach to restoring the reputation of their footwear.

"After all, can the collective of a plant that produces cigarette lighters not set as its goal to surpass the notorious 'Ronson'? And is it not pleasant to work as a saleswoman in a bakery which has the reputation throughout the city that it always sells fresh bread in a complete assortment?

"In the Machine Tool Building Association ineni Sverdlov, the development of export activity became this kind of common and interesting goal for everyone."

To "Open Up" People Without "Closing Up" Oneself

Everything is based on the workers—this was Kulagin's credo as director. The technical equipment, technology, quality—everything depends on them. And if the manager is able to manage them, all problems can be solved, including those such as turnover, discipline and labor organization. Kulagin thought that it was precisely here that the manager's ability or inability was manifested. He considered management to be an art where talent cannot be replaced by any kind of learning, and the main quality of the manager is the ability to manage people.

His idea was simple: in order to move forward it is necessary for the interests of the worker and those of the administration to coincide, for the worker to be a conscientious and full-fledged participant in the production process.

He had to overcome the ideology of the past epoch when it was thought that man was a "little screw," a part of the overall machine which someone from the outside sets into motion. And nothing depends on this "little screw."

Kulagin's special relationship to that movement which is now called the brigade contract is well known. And Georgiy Andreyevich approached it from the experience of the artel of the past. He took note of and analyzed all the smallest details of the brigade organization of labor. He delivered lectures to managers on this subject. The preserved outlines of these lectures impress one with their careful development and their erudition which is unusual even in our enlightened age. He was uncompromising in realizing brigade labor. He was unwilling to replace managers—he thought that this did not contribute to mobilizing people for serious tasks. But he would remove an experienced, honored shop chief who was not willing to understand the advantages and the need for brigade labor. In general he evaluated an individual only in terms of his attitude toward work. In so doing he enjoyed "opening up" active young people.

G. M. Kononova, member of the association plant committee:

"Georgiy Andreyevich visited the shops frequently and never passed up a chance to attentively ask the workers about all of the problems and their

attitude toward plant life. Once he asked me: 'I want to make your shop chief my deputy. What do you think, is this a good idea?'—'Perhaps,' I said, 'he is a good chief and would be a good deputy director. But who will we be left with?'" He smiled: "We will find another one who is just as good."

He put forth a number of nontraditional methods of solving personnel problems. They were nontraditional also in the sense that they took into account mainly the interests of those around whom the problems revolved. According to Carnegie: There is only one way of getting somebody to do something. The other must be willing to do this "something" himself. There is no other way. For example, in order for there not to be a shortage of skilled personnel and in order for the unique machine tools to be operated on three shifts, he arranged for each person working on such a machine tool to have a substitute. They could replace the basic workers, and gradually became one of them. The provisions concerning special bonuses (up to 200 percent of the earnings in the 13th wage), length of service and so forth are applied also to the substitutes. Now all this seems to be the norm. It is awkward to keep repeating oneself, but when speaking about literally all of Kulagin's ideas one must say: "Now this is generally recognized. But that was then.... Then he was "walking through a red light." This was the case with the brigades. Even without his participation, this developed in the association. Without him they did everything about which he spoke: They combined the work of the machine tool operators into brigade-units and established a technical assignment for comprehensive improvement of production and quality on the basis of the brigade form of labor and evaluation of each subdivision according to its contribution. Kulagin's involvement in the brigade method and his belief in its possibilities were so great that even when he had gone on pension he remained a consultant on these questions at the Kirov Plant.

In the association he knew his workers and they knew him; he was a leader who was always available. And his sincerity and open character played no small role here. He was able to be openly excited about something which seemed to him to be worthy of excitement. Mastery—first and foremost.

"And What Did You Say or Did He Do?"

It was as though Kulagin raised those around him to the level of his own knowledge and interests. "What, you have not read that? But what do you do in your free time?....—This was one of his usual questions. And those who respected them—the absolute majority—automatically were drawn upward.

Ya. M. Chudnovskiy, Kulagin's deputy for production, had much to do with Georgiy Andreyevich personally:

"They say that people are lucky or unlucky in life. I think that I was lucky. I encountered such an exceptional person on my path and I myself developed under his influence. Kulagin was a phenomenon, and he was a larger phenomenon than the position he occupied or even the results he achieved. The main thing in him were his ideas. It is a shame that he died just as his time had come.

"If one were to speak about the impression he made on those around him, it was like lightning, like an explosion. He showed us a wealth of possibilities and showed that they were realistic, that they could be utilized. In any situation, Georgiy Andreyevich saw a subject for dispute, which he could wage passionately and with any opponent. At the same time he was very sincere and attentive to people. In the association we became accustomed to living according to his standards, and even today one sometimes hears: 'Well, that is not the way Kulagin would do it....' If he had promised something there was never a time when he forgot. He either did not promise or else he promised and did it. Sometimes this was to the detriment of relations with higher-ups, but he did what he promised."

Ya. G. Goldin, deputy head designer of the association:

Georgiy Andreyevich has not been the director for 10 years, but much is still evaluated according to his standards. What can one add to this? 'Kulagin would support this or would have done this....' He could see the people on whom he needed to make strict demands and to whom he needed to explain so that his ideas would sink in. And there was always a pivotal point for the rich articles arsenal of means: the goal. He was able to prove that he was right both to workers and to managers. But at that time I do not think that he had the support of the ministry. Now everything has changed. But at that time it was a tragedy, one of the reasons why he left the association."

G. A. Drobilko, USSR State Prize Winner, who worked at the IMZ for 52 years:

"We met more than 40 years ago. We both worked at the IMZ, he as head mechanic and I as head technologist. At first, we looked one another over and then came a mutual sympathy which turned into friendship over many years."

"One was impressed by Georgiy Andreyevich's breadth of views, his constant desire for self-education and the diversity of his interests. In addition to technical problems, he was interested in artistic literature, art and problems of philosophy. He was always an interesting conversationalist and an expert and a lover of Russian antiquity. He entered disputes and discussions with a good knowledge of his subject and it was clear that long ago he had established firmly for himself 'what is good and what is bad' and had always been guided by this in life."

Ye. A. Plotkin, former head engineer under G. A. Kulagin:

"I have ever seen a better director, although I have worked with many in my day. He was an intelligent person. For some reason this quality is rarely noted as the main one for a manager, and people speak more often about his efficiency and love of work. And yet it is better to lose with a wise man than to find with a fool—as the saying goes.... There are people who know a foreign language fairly well and could speak, but they do not speak because they are afraid of appearing ridiculous. Georgiy Andreyevich did not know the language brilliantly, but he was not afraid to speak. He always repeated: 'If you do not get into the water, you will not learn to swim....' Frequently the manager technicians are juxtaposed to the manager organizers who skillfully mastered the 'human factor.' But an intelligent manager is

distinguished by the fact that he is able to analyze any situation and find a path to the solution to the problem. And it is always people who solve the problems...."

Recall the remark of E. B. Dolinskiy:

"Pushkin said that that we are lazy and uncurious. But this could not be said about Kulagin. Kulagin was not lazy and he was extremely curious. He was interested in everything everywhere and he was able to see and find the unusual everywhere. His encyclopedic interests probably contributed to this. He knew three languages, had studied the works of Lenin in depth, and he had an excellent knowledge of literature on management, technical literature and artistic literature. He loved the theater, he drew well, and he wrote poetry. He was able to be the life of the party. He would cry whenever he heard 'Day of Victory'...."

During Those Blockade Days

...The chapter from the blockade diary is called "A Test for Endurance."³ Georgiy Andreyevich lived through the war and through the blockade in Leningrad. He worked as the head mechanic at the IMZ. G. A. Drobilko recalled these times:

The years of the war and the cruellest blockade of Leningrad are especially memory. The plant was one of the few in the city to continue to operate as well it could and to fulfill orders from the front. The IMZ changed over to the production and repair of heavy tanks armored train, and it produced missiles and ammunition. In this extremely difficult situation it was necessary to maintain the man and the patriot of the homeland, preserving humanity and a firm belief in victory over the enemy. In the name of this victory Georgiy Andreyevich kept his diary, which, unfortunately, has only been partially preserved.... In order to survive along with the plant its workers organized collective gardens. Our plans were next to one another and Georgiy Andreyevich and I every evening studied the ABC's of agriculture (frequently under artillery fire. But even in those most difficult days we found time for arguments as well, and heated arguments, and of course there was also time for dreams of the future...."

And so, the winter of 1941.

"...I finally moved to the plant block-station, putting my cot in the office behind the compressors and next to the cot of the shop chief, Pavel Semenovitch Pismenniy. We had to spend many winter days and nights together in the midst of the heroic collective of the block-station, not halting work for a minute during the entire blockade.

"I did not keep notes in November and December. But from these weeks I will always have a sense of the inevitable descent into the cold and fog, during which time flickers of hope alternated with a sense of impotence in the face of what was happening.

"The days became shorter, the frosts more severe. We received less and less

bread. Our forces weakened. I think that these weeks were the most difficult in more than just my life. Perhaps this is why the memory has crowded out almost all recollections of these days, which were like a nightmare."

The plant, hit by bombs and bullets, "became like a skeleton." But no tests could force the young head mechanic to turn in on himself and on his own sufferings. He found a source of courage and strength in Greek myths. In his diary are entries about the watches of the electricians. Economizing on fuel. Interruptions in the energy supply. Dry production entries tell of the quiet, not loud, but indefatigable courage of those who, during the Leningrad blockade thought not about prolonging their own lives, but about the common cause of all the people. And he remained a man in the most difficult times.

"...The short winter day is drawing to a close. There is a hard frost. The empty, silent Sverdlovsk embankment. The blue snow squeaks beneath your feet. The cold sky at sunset hangs over the dark hulks of the buildings. In the middle of the snowy roadway stands a boy craftsman in a uniform cap. He stands all alone; there is no one nearby. And he howls. He howls loud and long, like an animal. He does not cry, and he does not lament—he simply howls and walks from side to side, about to fall any minute. I took him into the plant committee. He said nothing, he asked for nothing, but he gradually quieted down and only rarely, now, in a human way, he would sigh....

"...The two of us were alone, I, and, it seems Kolesnikov, were returning to the plant at night. We went through the city on foot from the hospital where the chief of the communications shop, Layn, lay dying. We had brought him something but it was too late to help him—we learned too late: Layn had died...."

In Moscow, in the Museum of the Revolution there is an amazing document. During the days of the blockade five engineers wrote the "Pink Book" (it was printed on pink scrap paper for lack of anything better). One of its creators was G. A. Kulagin. He wrote in more detail about this as follows: "It was an audacious plan for reconstruction of the plant that was developed to the accompaniment of fascist shells by a group of engineers who were barely a step away from death. This was a dream plan. It set a goal which fascinated the imagination of those times: to achieve an annual output of turbines with a total capacity of 1 million kilowatts." In order to produce turbines with a unit capacity of 25,000 and 50,000 kilowatts, which were considered large for that time, they made a serious engineering plan with calculations for machine tools, production areas and capital investments necessary for this goal. This plan was subsequently used as a basis for the restoration and reconstruction of the plant. A copy of the "Pink Book" is also preserved in the museum of the plant's history.

He died in 1985 at the age of 73. He worked right up until the last hour. He was not a director of pension age, he retired himself and he was not the person pensioners had become accustomed to regarding themselves to be. Perhaps it was the last decade that was the most fruitful for him. He taught, consulted, delivered lectures and engaged in public work. His main occupation was commentary in the precise meaning of this word. He was quick to share with others what he thought about the main problems of economic and social

life in the country. The list of his publications would apparently amount to more than 100 titles. Manuscripts were also left. His ideas and suggestions have not yet been generalized and perhaps in some of his articles that are 10-15 years old, he said something that was premature at the time and drew no attention. All this, as one says in science, is "material for further research."

If one were to list his books and articles of recent years one could clearly trace an interconnection among those lines and directions along which Kulagin moved in the perspective that he could see. The role of the "human factor" in production. The art of management. The priority of quality indicators. The forcing of scientific and technical progress. Problems of engineering and labor personnel. Now everyone is aware of these problems, but Kulagin understood their significance at a time when they had not yet manifested themselves so critically.

They warmly discussed this meeting in the association:

"Look at what they are writing about now, what they are saying? This is our Kulagin!..."

FOOTNOTES

1. ZNAMYA, No 10, 1985.
2. "Rabochiy—Upravlyayushchiy—Uchomyy" [Worker-Manager-Scientist], Moscow, "Sov. pisatel", 1976.
3. "Bnevnik i pamyat" [Diary and Memoirs], Leningrad, Lenizdat, 1978.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

ABUSES OF INSPECTION WORK REVEALED

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVOODSTVA* (EKO) in Russian No 9, Sep 86 pp 145-156]

[Article by Mikhail Rechkin: "Confession of an Inspector"]

[Text] All the events and heroes depicted in the essay are real. Only the names and the places have been changed. Described in this crucial topic, which is taken from life itself, are real shortcomings and contradictions inherent in the system for monitoring economic activity. It should be emphasized that the situation is now changing and the party is waging a persistent struggle against all kinds of violations of socialist law and the practice of abusing official positions. Measures are being taken which will contribute to increasing the prestige of the inspector. But the problems reflected in the essay are still crucial.

"Inspectors, seeing that their labor is not producing any positive results, frequently leave this work or lose their principles and their demandingness. And if this is the case the leaders of the organizations having jurisdiction over them can again violate state and financial discipline with impunity...."

—E. B. Gurskiy, EKO, No 10, 1984

The aircraft was sharply gathering altitude. The unseen but powerful force softly pressed me into my seat. But it seemed that this force did not affect my neighbor: bent across my knees he continued to look greedily out the window. He was a man of about 40 years, wearing glasses with dark, thick lenses, and he was dressed in a black leather jacket.

He apparently sensed my gaze and, holding onto the armrest with his left hand, slowly settled back into his seat. Then, turning to me, he said with a sigh: "Well, that is it.... I have said my farewell to Angalak."

"And it seems that you did not want to leave," I noted sympathetically.

He cast a quick glance in my direction, but remained silent. Then he suddenly asked:

"Could I have seen you in the interrayon fishing consumers union office?"

"Yes. I was there 3 days ago."

"Did you get a job?"

"No, I was looking for work for my wife."

"I see," he said. "Well, and what did they tell you?"

"They said there is a vacancy for a senior inspector."

"All is correct," he said thoughtfully, "I was fired, and that was the vacancy I left."

"Excuse me," I muttered, disturbed.

"Never mind," he waved his hand limply and, turning toward the back of his seat, fell silent.

The aircraft had already gathered altitude. The turbines hummed smoothly. Under the wing of our YaK, like a reflection of the snowy tundra, floated the blindingly white shroud of clouds. I tore my gaze away from the window and looked around. My neighbor sat there in his unbuttoned leather jacket, his head leaning on his chest, and, it seemed, he was sleeping. Many passengers, lulled to sleep by the monotonous hum of the turbines, also slumbered in their seats, and only about five or six people were leafing through magazines brought to them by the stewardess.

My neighbor shifted and, without raising his head, as though speaking to himself, said:

"I would not advise your wife to get a job as an inspector in the interrayon fishing consumers union."

"Why?" I was surprised.

"Well, at least...." he continued to talk, straightening up, "well, all right, I will tell you. Exclusively for the sake of your wife. Incidentally, call me Nikolay Yakovlevich, and you?"

I gave him my name.

"And how old do you think I am?" he asked suddenly.

I gave him a steady gaze, perplexed by such an unexpected question. His abundance of gray hair immediately caught my eye, and in the corners of his eyes, when he looked to the side, I noticed small wrinkles and both cheeks were crossed with deep lines.

"About 45," I answered unconfidently.

"Are you 30?"

"You guessed it."

"Then I am only 5 years older than you are."

Having noticed my confused gaze, the tired man put his hand on the armrest and, sighing heavily, said:

"During the time of my inspections I was threatened with murder several times, but I began to get much worse only when my wife and son left me. In the morning I went up to the mirror to shave—and my temples were gray...."

"Did you get a divorce?" I asked cautiously.

"She left me for a retired person," he laughed bitterly, "and she left a note: 'Forgive me, I am very tired and I can no longer live this way. And anyway, they will do you in sooner or later.' And I do not especially blame her. It really was not easy for her with me...."

"This is why he stared into the window so steadily," I guessed.

For a moment Nikolay Yakovlevich was silent, looking in front of him, and then he started speaking again:

"I came to Angalsk from Roms. In Roms I worked as the senior inspector for the control and inspection administration of the oblast consumers union. At that time I, like you, was 30 years old. I worked at the Uvalskiy Raypo. I had an apartment and a wife and son. It seemed that everything was going well. Until one time when I discovered a writeup to the annual commodity turnover for the raypol. I went to Roms, reported to the supervisors, but instead of gratitude I received a reprimand because of my 'untimely' digging up of this writeup. The oblast consumers union, you see, had already sent its report to Moscow. 'Look what kind of a position you are putting us in!' the deputy chairman shouted at me.

"When I came out of the office I was shaking all over. I went into the chief of the inspection administration and thought that maybe he would explain to me what I had done wrong. And the chief himself greeted me with a question: 'What is happening, Nikolay Yakovlevich? I just received a phone call from the chairman of the board of your raypol, who told me he would not even let you into the office!'"

"First I was confused: How could this be? After all, the chairman is the major party guilty of the writeup! But I had indicated that clearly in the report! And then I was overcome with embarrassment, for he understood everything perfectly well.... In brief, he sat down at his desk, wrote out a statement and fired me. This was a hard thing, but...." He threw up his hands, as if to say: What can you do?—"I decided to go north. At first I

lived alone. After a half-year I received an apartment. My wife and son came."

He fell silent again—apparently under the influence of memories that had been stirred up, but soon he continued his story:

"Somehow I was especially struck by my very first meeting with Purtnov, the chairman of the board of the interrayon fish consumers union. I went into his office and looked: He was sitting at a large desk, a thinnish man of about 50. I introduced myself. We started talking.

"I spoke with the chairman, one might say, in a relaxed way. But I was bothered by some feeling that would not leave me.... It is difficult to put it into words. His eyes were colorless, edged with yellow, cold, untrusting, and when you met his gaze it was uncomfortable and his eyes quickly dropped. Although he smiled, and also it would seem that he was talking freely...in general I understood that it would not be any fun for me here either. And I was not mistaken.

"We had one inspector who had previously worked in Sakhalin, so he had done battle with the chairman of the board of the fishing cooperative for 4 years. He discovers one abuse and the chairman simply laughs. He finds another—and the portrait of the chairman is already on the city "honor board...."

"He said that he called him into the office, locked the door and starting talking. 'You fool,' he said, 'you must live more simply. Think: we live for some 60 years and then we disappear! You hear? We disappear forever! So why can I not live these years allotted to me by fate to my own satisfaction? Do you think I am the only one who lives this way? You are mistaken. Here you have dug up some dirt on me, and told the procurator and you probably thought that you would send your chief away for 10 years and earn your laurels for this. Is that what you thought? Well, here I am! I am standing in front of you. You fool, I will teach you common sense! But, after all, my patience is running out! Are you going to stop?'

"The inspector did not submit to the persuasion. He wrote to the Tsentrosoyuz," my partner in conversation laughed ironically. "His letter was returned from there to the oblast fishing consumers union and there the chairman had his own people all around him. They called in the inspector and told him to get lost. He gathered up his things and—out of Sakhalin. Since that time he has 'gotten wiser.'"

"Was he a coward?"

"How did they say," Nikolay Yakovlevich hemmed and hawed. "Have you ever heard about a 'white' person?"

"White? What is that?" I did not understand.

"And so.... During one inspection I put the pressure on a worker but he said to me: 'You cannot do anything to me. I will continue to work just the way I have always worked. You are just wasting your energy, since I am not an

ordinary person, I am a "white" person. You understand?' Well, understandably, I was surprised—who wouldn't be. But this guy explains: 'A white person is a party worker. He has an excellent position such as I have. Connections. Without connections, I am nobody. And money. Big money—wages mean nothing here.'

"I had encountered such contemptible people before, but, from my observations there seemed to be more of them. And, as you see, they have their own 'blue blood' philosophy. Departmental control cannot take care of this. Surgery is needed here. Many inspectors understand this, but not wanting to tempt their fate for nothing, write 'diplomatic' inspection documents, pussyfooting around the real point. And there are no longer very many real inspectors in departmental control. In 16 years of work I have met only one."

"That cannot be!" The words burst out of me involuntarily.

"Perhaps I was just unlucky." He threw up his hands. "But I never saw another inspector like Anatoliy Ivanovich Ivanov. He was truly a fanatic. He could work 14-16 hours a day without any day off and frequently without lunch or dinner. He had a small immersion heater in a glass of water, he would throw a teabag in there and a lump of sugar, make a sandwich—and that would be all he ate. Once he conducted an inspection after which all the management of the consumers union were sent to places that were not so remote. It is especially interesting that the thefts he revealed 'increased' over many years! And inspections were conducted each year in this rayon consumers union," he expressively raised his index finger and, smiling, pointed at me.

"And Ivanov had never been there before, if you do not count the last inspection," I guessed.

"Precisely."

"Well, then, not everyone was able to discover this theft," I presumed.

"The fact is that it was not complicated or confusing. Everything is explained differently: working in departmental control were mainly specialists with weak theoretical preparation and many of them had never even done practical bookkeeping work. But even before the war Ivanov had thoroughly studied banking and then after the war had mastered the bookkeeping system for procurement of the consumers cooperation. Having become an inspector he studied wholesale and retail operations in trade down to the minutest detail. A real ace!

"In 1970 I, an inexperienced inspector at that time, was sent to Novosibirsk for a 2-month course for increasing my qualifications and Ivanov also attended these courses. In the control and inspection administration they were surprised and thought that Anatoliy Ivanovich simply wanted to rest. But they were deeply mistaken—he had gone there to learn.

"That was the first time I ever saw him. He seemed irritable to me and not very talkative, but then we became friends. He turned out to be a simple person. He found out that I compose jingles, and he sang a couple.

"So in the courses I could compare Ivanov with other inspectors. And they had come from all parts of Siberia, the Urals and the Far East. And I was literally shaken by what I saw there. The chief of the inspection division of one experimental raypol could not answer the question 'The Inspector. Rights and Responsibilities.' And the senior inspector of the control and inspection administration from Yakutiya, who we respectfully called Vasily Vasilyevich, on the bookkeeping examination did not make a sound, and when the instructor could contain herself no longer asked: 'So, are you going to answer or not?' —he blurted out: 'Valentina Ivanovna, will you allow me to answer in Yakut?...' He said this in such perfect Russian that all of us, along with the instructor, of course, not knowing Yakut, were shocked. Nobody expected such a 'slick' move from him.

"Only four out of the 45 passed through the 'thorns' of the examination the first time. And Ivanov was among them.

"Why did he work effectively and, incidentally, why was he awarded the Emblem of Honor 'for his hard work'? Because he had been very lucky with the manager. The chairman of the board of the oblast consumers union had appreciated him as a specialist and supported him completely. But, alas, that happens rarely. This is why they do not try to get many inspectors to increase their qualifications. If they knew more they might dig up something. And as a rule the managers of the consumers cooperation knew everything possible, so that whatever the inspector digs up will be covered up with the dust of the archives. Those who try to stand in the way of this end up in disfavor. If the inspector wants to fighting against a manager who has dishonored himself with abuse he will be dealing with his highly placed teeth. Do you think they do not believe in the power of the 'white person'?"

"But how did you become an inspector?"

"How did I become one? Very simply. I completed the cooperative tekhnikum, was given the specialty of a bookkeeper, there were only two of us in our group, and we were offered the job of inspectors.

"First they sent me on temporary duty to work with an old inspector, Gennadiy Belovodskiy. At our first meeting my mentor uttered: 'An inspector should always be well-dressed, absolutely with a tie, cleanly shaven, and slightly above it all.' True, Belovodskiy himself had a thick gray stubble and was dressed so that at first I thought he was a warehouse worker, but in one thing he was always irreproachable—every day he was slightly above it all. Which, to be sure, did not keep him from working as an inspector for 15 whole years. Incidentally, I rarely found any inspectors who do not drink."

"And yourself?" I smiled.

"I tried to emulate Anatoliy Ivanovich Ivanov in everything. But I bungled my first inspection," he laughed. "And so badly that I remembered it all my life."

He was silent for a moment, and then said softly:

"Ivanov is a clod...."

"But what can one do to make sure there are more of them?"

"First it is necessary to solve the problem of departmental control. He frequently received 'pressure' from within the department. His effectiveness is decreasing each year, like rawhide.... They are writing about this in the magazines and newspapers. Especially frequently in recent years. Judging from the articles, the problem of departmental control has been completely disclosed and ways have even been indicated for solving it, but nothing has changed. As early as 1974 I read in PRAVDA an article by the procurator of Zhitomir Oblast in which he pointed out all the inability of departmental control to solve the problem set for it, and he suggested transferring its functions to financial agencies. Ten years have passed, but what has been done?"

He fell silent, looking through the window, although he could hardly see anything at that time. The tight bundles of muscles rolling under the skin in his skull and the red spots on his cheeks betrayed his disturbance.

"Well, what is the solution to all of this?" I asked cautiously.

"I am not the one to answer that question," he laughed. "I can only say one thing for sure—sooner or later it will be necessary to solve this problem."

"And what do you see as its solution?"

"The same thing that many others see: It is necessary to transfer the functions of departmental control to the financial agencies, and the sooner the better. And in the meantime I do not advise your wife to get a job in the interrayon fishing consumers union, and especially as an inspector. I am afraid they would scare her out of her wits."

"But why? They say that Purtnov has been fired?" I was surprised.

"Fired? Who told you that? Purtnov is now chief of one of the sections of the oblast fishing consumers union. He was more 'promoted' than fired."

"But if he has become totally immersed in the interrayon fishing consumers union, he is no longer here."

"Purtnov is not there—this is true, but the 'Purtnov spirit' has remained. I know that the person who came to replace him is not very different from Purtnov himself."

We were silent.

"No, just think!" Turning sharply toward me, he started to speak bitterly: He has infiltrated so many people! It is simply a miracle! Under his leadership losses from mismanagement during 1982 reached the million level! They were 10 times greater than the average for the Rospotrebsoyuz system!

The plans for commodity turnover during 1983 and 1984 failed! Write-ups in transportation and construction became customary: thefts, squandering and short-changing have doubled just during recent years! Managers in the system were sentenced by the people's court to long periods in prison for taking bribes from black marketeers! Management and official positions are really filled with people who in the past have either been convicted of selfish crimes or have compromised themselves in previous work! Just one former chief of the Godym transportation enterprise in a year and a half caused the state losses amounting to a quarter of a million rubles!"

His movements became jerky, his voice became loud, the spots on his cheeks burned brightly. People started looking at us. But he, directing his attention to nobody, continued:

"In 1978 when the inspectors discovered the largest theft in the Nodinskiy Fishing Cooperative, the board of the oblast fishing consumers union had to write in its decree that Grigoriy Averyanovich Purtnov deserved to be relieved of his position. During that same year, along with the 'Nodinsky Surprise,' they discovered a group theft in the cooperative animal farm in which Purtnov's friend and deputy, Kotelnik, participated most actively. In the Angalsk city fishing cooperative, under the very nose of the board of the interrayon board fishing consumers union, there was a large overpayment of money to a group of decorative artists who had been working 'on their own metal.' And a year later the management of the oblast fishing consumers union, having completely forgotten about all these facts, petitioned the higher organizations to award Purtnov the honorary title of 'Honored Worker of RSFSR Trade.' And he received it...for his birthday. And this kind of conversion from punishment to incentive is no accident. In 1969, when he requisitioned a Volga for himself on credit, he was again 'punished' by being promoted. And all this took place before the eyes of thousands of people!

"Once I went to the chairman of the Turinsk Oblast singing, Maltsov, and asked for help removing from the system of the interray fishing consumers union people who had previously and were guilty, short-changing and embezzlement, the more so since the request had been signed by Maltsov himself. What do you think was the answer I received from the chairman, who, incidentally, was also an honored trade worker of the RSFSR? 'But, Garin, where will we find the honorable people? After all, it is not from a good life that we take these Godyms and people like them....'

"That is the way it is! At that time I wanted to ask: 'But, excuse me, why in the hell did you sign your decrees demanding that they be fired? Why, you hypocrite, make the shortage of paper worse? After all, we do not manage even to read all of these documents!'"

"Later, in the board of the oblast fishing consumers union when they were considering the results of the verification of my statement to the Rospotrebsoyuz, I said just that. They began to persecute and slander me and finally they got me fired. And also this was done on order from Maltsov.

"I wrote about this to the Rospotrebsoyuz and then to the Tsentrosoyuz--like a blank wall...."

He fell silent, leaned back in his seat, and then suddenly sat up abruptly, turned to me, and gesticulating with his right hand, said:

"When the journalists asked Kirill Orlovskiy how things were going with the thefts and other kinds of abuses on the Rassvet Kolkhoz, he answered briefly: 'We have no theft. We stamped that out.' He was a great person! It seems to me that he was profoundly correct. It is indeed necessary to stamp it out.

"Oh! It seems we are landing," his hands mechanically reached for his seat belt.

"Do you fly frequently?" I asked, noticing these movements.

"What? Yes.... All of our work is away from home. Like sailors at sea, we spend half of our year doing inspections. Only our wages are much less than for sailors, and we have almost no satisfaction from our work," the irony could be heard in his voice. "You struggle, you spare neither yourself nor your family, and it turns out that you are struggling like a fish on ice.... That is all, we are landing. Are you going to Romsk? Well, then we shall talk again."

...Before entering the Khanty-Mansiyskiy Airport he stopped.

"Stand here a bit. Look at that sun! Like spring.... I have always enjoyed flying through Khanty-Mansiysk at the end of April or the beginning of May. We still have snow on the ground and blizzards, but here it is really spring. The trees have sticky buds. The smell, it can drive you out of your mind.

"And you know, once in Tyumen—it was during the spring—when coming out of a bus I fell into the hands of a controller, and it was on my birthday!" He smiled, his eyes squinting.

"You lost your ticket?" I could not hold back a smile myself, imagining one inspector falling into the "hands" of another.

"No. I had purchased a ticket. I had been to the bazaar and had sacks of green vegetables in both of my hands, it was incredibly stuffy in the bus, the sweat was dripping into my eyes, my head was spinning and I was afraid that I would not make to the hotel...." In general this had nothing to do with the ticket. Well, the controller appeared at the exit. A woman. She grabbed me by the wrist and so firmly that her hands seemed like claws. The tomatoes in my sack were probably paler than my face was. What embarrassment! Later, after I had walked away, I thought: 'If all controllers and inspectors were like she was, they would be working to save the people's money. There would hardly be anybody who would want to live at state expense....'"

I listened to Garin with amazement. Somehow unquestioningly I believed his every word. He was tall and broad-shouldered, and at the same time he seemed somehow wounded, with his soul exposed.... At that moment I suddenly understood that this person had not simply been speaking with me about what had bothered him—he was confessing.

Already in the aircraft I asked Nikolay Yakovlevich Garin: "And did you have any victories?"

He understood what I was thinking, smiled and, slowing down, answered:

"Of course I did. But lately it has been more and more difficult to work. The resistance from the Purtnovs is increasing, their appetites have become immense, and, unfortunately, they are gaining strength. This is a fact! And all of these people—'white clothes' or spotted—they are indeed intelligent and sneaky, they have many connections, somebody's protection, and it is difficult to fight with them, and it would even be difficult for Ivanov with his high professionalism. Anatoliy Ivanovich went on pension when his time came. And their actions caused not only material harm, but also an immense amount of moral damage. But still when the spring is squeezed to the limit, a critical moment comes.... Critical for the Purtnovs and the Maltsovs. And for their protectors. This is inevitable!"

Perhaps that is the way it will be. But is it necessary to wait until the "spring is squeezed to the limit"? This is what occurred to me at that moment.

...I parted with Garin in the Romsk Airport. He left and I stood there staring after him. At that time I did not think about how difficult it would be for my wife if she were hired as an inspector at the Angalsk Interrayon Fishing Consumers Union. I thought about Garin. No, such a person cannot find peace, he will not be able to sit somewhere in a quiet bookkeeping office. He made his choice long ago. And let Inspector Garin step down now. I am confident that tomorrow he will be the winner in a new skirmish with Purtnov. Battle does not weaken people like this, but tempers them. And I think that his hopes and those of many department controllers will eventually be realized. A more effective and workable form of control will appear.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

ECONOMIC INDEPENDENCE IN CEMA COUNTRIES DISCUSSED

Novosibirsk EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA (EKO) in Russian No 9, Sep 86 pp 157-174

[Article by N. V. Bautina, doctor of economic sciences, International Institute of Economic Problems of the World Socialist System (Moscow): "The Plan and Independence in Economic Mechanisms of the CEMA Countries"]

[Text] In the "Declaration of the Basic Directions for the Further Development and Deepening of Economic and Scientific-Technical Cooperation of the CEMA Countries," adopted at the High-Level Economic Conference of the CEMA Countries (Moscow, 1984), it was emphasized that the proposals for bringing the economic mechanisms of these countries closer together should contribute to improving the mechanism for cooperation. An analysis of the economic mechanisms of the European CEMA countries reveals the general tendencies in the process of their improvement that are conditioned by the homogeneity of the socioeconomic structure, the principally common problems of switching the economy over to the intensive path of development, and the utilization of the growing social activity of the labor collectives and each work. Concerns for ensuring balance of the national economy and eliminating indebtedness to Western countries and commercial banks are typical. These common problems include various concrete tasks and various approaches to their solution, which reflects the concrete internal and external economic situation: the level of economic development that has been achieved, the degree of provision with resources, the degree of inclusion in international socialist division of labor, the intensiveness of foreign economic ties, evaluations of preceding experience in management, planning and economic incentives, accepted concepts of improving the economic mechanism and the establishment of concrete goals for economic development in the future up to the year 1990 and up to the year 2000.

Experience shows that planned economic measures do not always produce the expected results everywhere. This is related not only to their nature and complexity, but also the content of the tasks that have been set. Today we have not yet determined clear criteria for the effectiveness of economic measures which would make it possible to single them out from other factors that provide for the achievement of various socioeconomic results. This is precisely why we need a detailed analysis of the condition, improvement, and evaluation of the effectiveness of the existing economic mechanism.

Centralized Planned Guidance

Centralized planned guidance of the economy in all of the CEMA countries is the economic activity of the state performed by its authorized agencies. It is realized through a system of organizational and legal norms and national economic planning as well as the application of economic levers. Additionally, each country has its own ratio between planned national economic measures and economic levers; they also distinguish between national economic planning and methods of influencing the basic economic unit. A two- and three-unit system is typical of the organizational structure of management.

In all of the CEMA countries, central state agencies concentrate their activity on the development of concepts of socioeconomic development, specific tasks for implementing them, and control over the economic activity of economic organizations, enterprises, associations and combines. The state planning commission developed long-term, medium-term and current plans for socioeconomic development and determine the basic methods of carrying out the tasks that have been set. In all countries the state planning commissions are the main economic center. In recent years, the role of central agencies of the credit and finance system have increased in the area of extending credit for capital investments (especially in Bulgaria, Hungary and Poland) and providing incentives for export production (Bulgaria, Hungary, the GDR and Poland).¹

In the CEMA countries the ministries of foreign trade (MVT) have a monopoly on foreign trade activity. On the basis of permission from the MVT and the central banks they selectively grant the right to exporting activity to the basic economic unit: the economic organization in Bulgaria, the enterprises in Hungary and Poland, and the combines in the GDR. In these countries it is possible to export at the level of the basic economic unit because of the corresponding organizational structure. As a rule, it is under dual jurisdiction: the MVT and the enterprise (economic organization, combine).

Practically all the countries have changed the organizational form and structure of the basic economic unit. There has been a marked tendency to include in the sphere either all phases of reproduction (combines in the GDR) or the phases of production and sales (the organizations for domestic trade and export) as is the case in Bulgaria, Hungary and partially in Poland, and within the framework of an experiment in light industry in the Estonian SSR (enterprise-store).

National economic planning everywhere constitutes the nucleus of the economic mechanism and to one degree or another exerts an influence on its arsenal of means. Typical of the latter is a considerable expansion because of the more complete utilization of such commodity and monetary instruments as the price, interest, credit and so forth. As experience shows, shifts in the direction of excessive utilization of monetary and commodity instruments and orientation toward the changeability of proportions of supply and demand sometimes lead to the appearance of inflationary tendencies, which is an objective restriction on their use in a planned economy and increases the elements of uncertainty in economic activity.

In the majority of countries, centralized planning is being improved as a result of strengthening the economic approach in the stages of preplanning development and the drawing up of the plan: the socioeconomic results that have been achieved are analyzed, the financial and economic substantiation of the planning decisions is increased, and economic norms, prices and payments for resources are adjusted in a planned way. In order to strengthen the entire system of plans and to transform the five-year plan into the basic form of planning, the role of the conceptual preparation of the plans has increased everywhere. In the GDR, for example, the concepts of economic and scientific-technical development are worked out at all levels; a special section on conceptual preparation of the plans has been introduced into the methods for five-year planning. In Hungary, when developing concepts for the basic problems of economic development for the five-year plan they take into account areas that are subject to financing through the budget.

Systems of material balances, as a rule, encompass in the annual plan several hundred consolidated kinds of products. The highest level of norm-setting has been reached in the GDR: it encompasses about 96 percent of the material resources that are expended. In those systems where direct methods predominate (the GDR, the USSR, the CSSR), balances are used primarily as an instrument of directive planning. In Bulgaria, Hungary and Poland, where indirect regulators are utilized more extensively, the system of balances performs mainly calculation and information functions.

The strategic and tactical goals of the economic policy are to be coordinated by the system of plans, including predictions, target-program developments, and long-term (10 years and more), five-year and current (annual and two-year) plans. But the majority of countries do not have directive long-term planning. The role of the long-term plan here is fulfilled by comprehensive programs, and also the basic directions for the period up to the year 1990 that are approved by higher party and state agencies. These countries are not completing the preparation of the corresponding documents for the period up to the year 2005.

Increasing the role of five-year plans in interstate planning, their substantiation and their stability means improving their coordination. The latter takes place in close coordination with work on national medium-term plans. The latest changes in medium-term plans are reflected in the realization of the agreements that have been reached and the results of the coordination process.

Current plans exert the greatest influence on the activity of production organizations, which orients planning of economic activity toward the solutions to current problems.

Directive Indicators

The positions of the State Plan are submitted to the basic economic unit mainly through directive (address) indicators (Hungary, GDR, Cuba, Mongolia, CSSR, USSR) or through economic levers (Hungary, Poland). In Hungary and Poland in certain cases they retain the contingents for individual kinds of

the most important products and control over import-export activity and also investments. In Bulgaria the positions of the State Plan are submitted to the economic organization both through directive instructions and with the help of economic levers (prices, interests and taxes). Additionally, indicators are established for profit and normatives for the wage fund.

Hungary and Poland typically have a considerable expansion of the information flows between central and economic agencies: concerning the goals and tasks of long-range planning, the methods of carrying out the planned tasks, the possible changes in economic conditions, the tendencies in scientific and technical progress in the country and abroad, and so forth. The differences in the methods of assigning the positions of the State Plan to the basic economic unit reflect the search for forms and methods which will correspond to the greatest degree to the changes in the content of the State Plan, expand independence and increased responsibility of the basic economic unit. In Poland, for example, they try to do this in the form of a competition using the criterion of effectiveness and on the basis of economic interest: the provision of resources is guaranteed, beneficial financial conditions are offered, and bank credit is guaranteed.

The directive indicators used by the countries (with the exception of Hungary and Poland) to assign the positions of the State Plan to the basic economic unit have also changed. Their numbers have decreased (Bulgaria, GDR, USSR, CSSR); the focus has shifted from quantitative volume indicators to indicators of effectiveness and quality; they have begun to use indicators that are directed toward realizing the achievements of scientific and technical progress and producing a particular product (GDR, USSR, CSSR). A new aspect is the utilization of indicators that evaluate the final economic results: profit or net profit (Bulgaria, Hungary, GDR, USSR, CSSR), net profit or modifications of it (GDR, USSR, CSSR), indicators of the fulfillment of commitments under economic agreements (USSR), and indicators of the effectiveness of export activity (Bulgaria, GDR). But the reduction in the number of directive indicators pertains to the macrolevel; at the level of the basic economic unit their number actually depends on the number of units of the management structure.

The economic agreement is becoming an important instrument in national economic planning. The sphere of its application in planning depends on the methods of management that prevail—direct or indirect. In Bulgaria, Hungary and Poland the economic agreement serves as the basis for plans for economic organizations, and in the GDR, USSR and CSSR it has become a means of carrying out tasks of the national economic plan.

The peculiarity of planning in Bulgaria consists in that the indicators of the five-year plan with a breakdown for the various years determine the minimal assignments that provide for balance between the domestic market and foreign trade turnover. The plan can envision an incomplete loading of production capacities: for certain enterprises the directive assignments account for 70-80 percent of the production capacities. The enterprises are permitted to plan independently the use of free capacities for producing additional products that are in demand on the domestic and foreign markets.

How To Plan Scientific and Technical Progress?

The need to accelerate scientific and technical progress and introduce its achievements is reflected in the state plans and programs for science and technology.

The peculiarity of control and planning of scientific and technical progress consists in that in local decisions, it is important to proceed from a unified scientific and technical policy which determines both the selection of the direction and scale of the development and the mass dissemination of the innovation.

Today in all countries there is a marked striving to overcome such a "bottleneck" as the introduction and dissemination of innovations. Bulgaria, Hungary and the USSR are created specialized voluntary cost accounting introduction organizations that operate on the basis of agreements and also enterprises and associations for joint scientific and technical activity.

In recent years in the CEMA countries there has been considerable development of long-term planning of scientific and technical progress, which relies on scientific and technical predictions (Hungary). The development of long-term concepts (GDR) and programs for the development of science and technology have become an important part of this. These documents, as a rule, are of a preplanning nature and serve as a basis for forming five-year plans (GDR) and programs for scientific and technical progress (Bulgaria).

In Bulgaria the list of programs included in the five-year plan at the national level is determined by the Gosplan and the State Committee for Scientific and Technical Progress on the basis of the National Program for Scientific and Technical Progress and national comprehensive programs in the strategic directions, taking into account the proposals of ministries, departments and academies.

In Hungary within the framework of priority directions for economic and scientific-technical development they have drawn up state programs which are financed by the enterprises and state organizations which are interested in them. They also control the course of the developments and provide for the introduction of the results that are obtained.

In the GDR comprehensive state assignments are established within the framework of the State Plan for the Development of Science and Technology. In essence these are target scientific and technical programs. When they are drawn up special attention is devoted to the introduction of the results.

In Poland, in order to overcome the departmental approach, they have created the State Committee for Technical Development, which is to regulate programs developed at the government and other levels of management.

In the USSR the five-year plan includes the basic assignments ensuing from the food and fuel-energy programs, from the program for environmental protection, and so forth. The five-year plan for 1986-1990 will also include the basic assignments of the "Comprehensive Program for the Development of Scientific

and Technical Progress Up to the Year 2000" and scientific and technical programs developed on its basis.

The CSSR has also developed comprehensive programs that are included in the five-year plan.

The five-year plans in the CEMA countries are the basic form of control of the implementation of the scientific-technical and economic strategy. They are also a concrete program that regulate all units of control of scientific and technical progress. The nucleus of these plans is composed of the assignments for the branches that provide for acceleration of scientific and technical development. In the majority of CEMA countries these are the branches of machine building, electric energy and so forth.

One of the radical changes in planning was brought about by integration measures. Today they involve both the macro- and the microeconomic level of planning and are implemented through central management agencies: councils of ministers, state planning commissions, foreign trade ministries, finance ministries, banks, and also territorial trade organizations—provincial and city companies for exports and imports (Hungary). In a number of countries (Bulgaria, GDR, Mongolia, USSR, CSSR) the State Plan has a special section for integration measures. At the same time they are also included in other corresponding sections of the plan for the development of the national economy. At the macrolevel integration measures are planned in Hungary, Cuba and Mongolia. In the GDR they are assigned to the immediate producers in the form of state planning assignments.

Economic Levers

Extensive application of economic levers that directly influence the cost accounting activity of the basic economic unit have become a typical feature of the improvement of centralized planned guidance. These include prices, credit, interests, taxes and exchange rates.

Their effectiveness depends both on the interest of the unit in their financial results and on the completeness of the self-repayment. Self-repayment is regarded as the covering of the unit's expenditures through incomes. The utilization of bank credit does not violate the principle of self-repayment; it can be regarded as future self-repayment.

The striving for cost-accounting self-repayment gave rise to a tendency to limit the production of products that were disadvantageous for the enterprise. If this product is significant to the national economy (these are mainly consumer goods) the enterprise receives a state subsidy. In order to overcome the undesirable redistribution of funds at the middle level of management, in certain countries these intermediate levels have been eliminated (branch ministries in Hungary, associations in Poland). But in the majority of countries funds continue to be redistributed at intermediate levels.

The significance of economic levers has increased in realizing the national economic plan. In countries where they play a significant role, a new section

pertaining to goals and methods of applying these instruments has appeared in the national economic plan (Hungary, Poland).

The role of economic levers changes depending on the sphere in which they are applied in the country's economy. They are utilized more in the production of consumer goods than in the production of means of production. In particular, in the sphere of production of the main kinds of raw material directive methods of planned guidance dominate. At enterprises economic levers play an important role in current management, and directive methods predominate in planning long-term processes (such as scientific and technical progress).

The Price

In all countries the price has become more significant for implementing national economic plans and providing for balance of the national economy and foreign economic activity. Bulgaria, Hungary and Poland use the policy of prices for consumer goods to influence the structure of consumption. The price policy for means of production in practically all countries pursues the goal of economizing on raw materials, processed materials, and energy. Three kinds of prices have been established in the CEMA countries: state (official); regulated by the state, but formed with the participation of the basic unit; and free prices, which are formed by agreement between the seller (supplier) and purchaser within the framework of an economic agreement.

In the GDR and CSSR three prices are not used. In all countries without exception there are state (official) firm wholesale and retail prices for means of production and the most important groups of food and nonfood commodities. The smallest proportion of firm state prices is found in Hungary: 30 percent for industrial goods and 43 percent for consumer goods.

Prices that are regulated by the state also have various concrete forms. These are the so-called limit prices, which stipulate mandatory observance of the upper price limit determined by the state. Below this limit the economic organization (Bulgaria, CSSR) can independently establish the price for a concrete commodity. In Poland the regulated prices include the price which is established by the manufacturing enterprise on the basis of expenditures, taking into account profit which comprises 10 percent of the cost of processing.

As a rule, free prices are established by agreement among enterprises in the sphere of material production and trade.. In one form or another they are regulated by the state. In Bulgaria they fix the maximum value of the commodity (100 leva) for which the economic organization can establish a free price. In Hungary free prices are established on the basis of directives of the State Price Committee and permissions to increase them; in Poland control over free prices is exercised through state prices on semimanufactured products. In a number of countries (mostly in Hungary and Poland) the basic economic unit participates in price setting, which is regulated by the state with the help of limits or upper limits on prices, administrative authorizations or centrally established rules.

One more improvement in the area of price setting is to use as a base not only calculations of the production cost (GDR, Cuba, Mongolia, USSR, CSSR) but also direct world prices (Hungary) or certain modifications of them through accounting for export profit in the price. Wholesale prices of 65-70 percent of the industrial products are formed on the basis of world prices in Hungary.

Prices established for import and export goods are unique. For the basic kinds of raw material and fuel that are imported the prices are established in all countries taking world prices into account. For export transactions they use wholesale prices as the basis for accounts between the producer and the exporter (GDR, USSR and CSSR) and transaction prices obtained by the producer (Bulgaria, Hungary and Poland). Negative deviations of these prices from wholesale prices are compensated for through state subsidies.

Tax

A number of countries use taxes, with which they regulate the economic activity of the enterprises as well as their financial results. The policy for imposing taxes is predetermined by the nature of centralized planned guidance of the activity of the basic economic unit, and also by the method of providing for balance of the national economy.

Here the turnover tax is imposed mainly in consumer goods. The policy and level for taxation vary in the various countries. In places where the formation of the prices determined by the central management agencies (GDR, Cuba, Mongolia, USSR, CSSR) the amount of the turnover tax depends on the price level. In the GDR its amount is determined by the difference between the wholesale price for industry and the price for the enterprise. In countries where the basic economic unit participates actively in price setting (Hungary, Poland), the turnover tax is used to set prices and is an instrument of state price regulation.

In a number of countries taxes are used to regulate the amount of profit left at the disposal of the basic economic unit. This way they can satisfy national economic interests and determine the contour of economic independence. Part of the profit is drawn into the budget in the form of a tax (Bulgaria, Hungary, Vietnam, Poland). Additionally, in Bulgaria and Hungary the tax is taken from profit and deposited into the budget of local management agencies. In certain countries a tax is paid for immovable property (Poland) and land (CSSR), and payment for land is taken from the profit of combines in the GDR.

In a number of countries (Bulgaria, Hungary, Poland) taxes are used to regulate incomes (the wage fund) of the workers. Then they either establish a tax on the growth of the wage fund (Bulgaria) or a tax on the wage fund itself (Hungary, Poland). Beginning in 1986 at Hungarian enterprises a unified "motivation fund" is created and a new policy will be introduced for taxing incomes. In countries where planned normatives are used for distributing profit (USSR, GDR, CSSR, Mongolia) normatives of deductions from above-plan profit are applied. There is also an added deduction from above-plan profit. In the USSR and Mongolia the free residual profit is deposited into the budget, and profit is not taxed in these countries.

Credit

The role of bank credit in economic activity and control over it has increased in European socialist countries. The policy for extending credit, the amount of credit and the interest rate are established for the enterprise. In countries where the funds of the enterprises are limited by the positions of the national economic plan the bank offers credit (circulating, investment) in the amount indicated in the central plan and strictly keeps track of the repayment of credit.

In a number of countries (Bulgaria, Hungary, Poland) the bank conducts a relatively independent credit policy which is based on the so-called credit capability of the enterprise, the understanding of which differs in various countries. During the 1980's in Bulgaria and Hungary bank credit has been offered on a competitive basis, especially credit intended for export activity. Since 1 January 1986 Hungary has had a policy of competition for granting credit.

Expansion of Economic Independence

The general direction for improvement of the economic mechanisms of the European CEMA countries has been expansion of the cost accounting independence and increased responsibility of enterprises, associations, combines and economic organizations, that is, the basic economic unit. The latter means the addressee of state (central) planning assignments which as a legal body bears responsibility for their fulfillment and for the effectiveness of the utilization of means of production belonging to the society under the conditions of cost accounting.

The ratio between economic independence and state planned guidance can vary. Thus the GDR emphasizes the responsibility of combines for the fulfillment of state planned tasks and the concepts of technical and economic development, balance work, social development of the collectives, and satisfaction of the needs for their products both within and outside the country. The independence of enterprises is based on other positions in Hungary and Poland.

Expansion of economic independence takes place under conditions of changing the economy over to the intensive path of development. This places certain requirements on the functioning of the basic economic unit. There are changes in this organization, sources and policies for the formation of funds, and their special utilization. Changes in the organizational structure consist, in particular, in the strengthening of the scientific and technical subdivision. It engages in the development of new technology or new products; scientific and technical decisions obtained from outside are adapted to the given production; new solutions are followed in world practice.

The basic economic unit is given rights and responsibilities in drawing up and realizing plans, carrying on export activity, and providing for cooperative ties within the country and with foreign partners (Bulgaria, Hungary, GDR, Poland). The economic organization in Bulgaria, the combine in the GDR, the production association in the USSR, and the production-economic association in

the CSSR are essentially administrative agencies. The enterprises included in them are legal bodies. The combine (GDR) and production association (USSR) carry out management through the head enterprise.

The difference in organizational forms and the completeness of their authority are in evidence not only among countries, but also within the country (with the exception of the GDR), depending on the branch of the national economy. The overall tendency in management at the level of the basic economic unit is toward more complete participation of the labor collectives in the adoption of planning-economic and social decisions.

In all the CEMA countries the planning of the economic activity of the basic economic unit has become a constituent part of the planning of the national economy. In the majority of the countries independence in planning is manifested on the basis of the State Plan (GLR, Cuba, Mongolia, USSR, CSSR). Within its framework they have freedom to carry out their tasks with the help of economic agreements (GDR, USSR). The foreign economic (mainly export) activity and participation in integration measures of the basic economic unit are reflected in its planning.

Funds of the Basic Economic Unit

Expansion of the "field" of independence, more complete utilization of cost accounting and above all the principle of self-repayment, and increased responsibility have been reflected in the funds of the basic economic unit—their quantity, sources and special utilization. In spite of the differences, in all countries the funds for the development of production is formed from profit (Bulgaria, Hungary, Vietnam, Mongolia, GDR, Poland, CSSR) and from the profit and part of the amortization (GDR, USSR). In the GDR the basis of the formation of this fund is the enterprise's normative share of the above-plan profit that has been received.

In the majority of countries (Vietnam, Cuba and Mongolia are exceptions) the basic economic unit forms the funds for the development of science, technology, and technical development (the names of the funds differ) which are used for purposes of technical reequipment and production and solving applied scientific and technical problems. These account for 60-70 percent of the expenditures for purposes of scientific and technical progress.

Funds for technical development are formed, as a rule, at all levels of management: in the ministries, associations and enterprises. But the majority of the funds (60-70 percent of the total volume of all funds) are concentrated at the middle level—in the associations (for a number of countries) and combines, which involves an increase in their role in technical development. In the GDR, where there are no norms for deduction established for a long period of time, their amount is determined annually on the basis of the sum of expenditures on new technical equipment envisioned in the plan. In Hungary, as in other countries until recently, there was also the practice of mandatory deductions into the fund for technical development (FTR). Beginning in 1986 Hungarian enterprises have been forming a unified "incentive fund," and they have been granted the right to independently decide the question of its distribution for the needs of technical and material and material incentive.

In the majority of countries the funds for technical development receive money from the sale of the results of research and development and also property values created or acquired through money from this fund (materials, testing equipment, instruments and structures left after the completion of testing and so forth). Also deposited here are earnings from the sale of experimental models and test series of products created with money from the fund. In a number of countries the fund receives part or all of the value of sold patents and licenses, increments to prices of items of high quality (GDR) and certain other incomes.

The FTR is intended for paying for scientific research and development carried out for the needs of the associations and enterprises, for purchasing instruments and equipment, for acquiring licenses and technical specifications, and for paying for expenditures for technical information, standardization and typization as well as some of the expenditures for the assimilation of the production of new technical equipment. These expenditures, however, do not include expenditures on the assimilation and preparation for series output or mass production of new items. As a rule, these are included in the production cost of the products and are only partially reimbursed through the prices (technical higher prices or increments are established).

The fund for payment for labor, as a rule, is formed as the sum of the wage and the material incentive fund (or the fund for participation in profit). In Bulgaria, Hungary, Vietnam, Cuba, Mongolia, Poland and the CSSR the basic economic unit does not form the wage fund. Each country has its own reasons for this general phenomenon. In Bulgaria and actually in Hungary the fund to pay for labor is the resulting residual; in Vietnam, Cuba and Mongolia—it is planned, that is, it is disposed of by the state; and in Poland it is determined independently, taking into account the economic levers (taxes) established by the state. An additional part of the payment for labor is determined by the material incentive funds. Their source in all countries except for Bulgaria is profit. The material incentive funds formed from profit are regulated through limits (GDR), with fixed interest on the wage fund (USSR, CSSR) or with taxes (Hungary, Poland).

Entering the Foreign Market

In a number of countries (Bulgaria, Hungary, GDR, Poland) the rights of the basic economic unit in the spirit of foreign economic activity have been expanded. It has been granted the opportunity to select the form of contractual relations with foreign trade and production enterprises (Bulgaria, Hungary, Poland) and to determine the form of accounting and also the conditions for the sale of exports or the purchase of imported products. At the same time, in the area of imports the high level of centralized guidance and regulation is retained.

The foreign economic activity of the basic economic unit is carried out on the basis of special permission (concessions—Bulgaria, Hungary, Poland) from state agencies. They establish the proportion of export products and the overall volume, their ability to complete, the financial position of the

enterprise and so forth. The forms of activity of the enterprises in the foreign markets are the most varied. Production and foreign enterprises can form joint stock companies for foreign trade activity with the participation of the Ministry of Foreign Trade (its proportion in Poland is 51 percent).

Today the CEMA countries are looking for the position of the Foreign Trade Association (VTO in the organizational structure of management. One of the forms is the specialized VTO, which is a legal body. It conducts foreign economic activity independently and can create companies with enterprises (Bulgaria, Hungary). Sometimes the VTO is under dual jurisdiction: both the Ministry of Foreign Trade and the branch management agencies (Bulgaria, GDR). Contractual forms of interconnection between production and foreign trade enterprises are expanding and their interpenetration is becoming stronger. For example, in Hungary a foreign trade enterprise can use its own funds to participate in the production activity of a partner enterprise.

Intergovernmental commitments are reflected in the national economic plans and their fulfillment is envisioned in the plans of the enterprises.

All of the CEMA countries are expanding the rights of the basic economic unit for utilizing currency funds from export revenues. In certain countries the currency can be used for purchasing goods that can expand export production (GDR, USSR, CSSR) and in others—for rearranging the export structure of production (Bulgaria, Hungary, Poland).

In the places where the basic economic unit has the right to foreign economic activity its financial position is affected by exchange rates and coefficients which are used to evaluate the sale of export and export profit. As a rule, currency coefficients are differentiated for the various areas (socialist countries and capitalist ones), which creates a certain incentive to export to the markets of capitalist countries.

With the adoption at the 41st (Extraordinary) CEMA Session (December 1985) of the Comprehensive Program for Scientific and Technical Progress (KP NTP) more significance is attached to direct ties among enterprises, associations and combines of the CEMA countries. For concrete problems of the five priority areas they have appointed head coordination organizations (93—Soviet, 1—Cuban, 1—Mongolian) which are the basic unit for implementing the KP NTP. The interaction of the head coordination organizations with national and foreign performer organizations will be carried out mainly on the basis of direct ties.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

ETHICS OF WORK RELATIONS EXAMINED

Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA* (EKD) in Russian No 9, Sep 86 pp 175-184

[Article by G. V. Vyatkin, candidate of economic sciences, and A. F. Katayev, sociologist, Ruben State University: "A Couple of Rules of Ethics for Job Relations"]

[Text] Ethics in the broad sense of the word is a code, a summary of rules of communication among people which has been developed by many generations. Of course, the formation of the rules of ethics for work relations are decisively influenced by production relations, which have taken form with the given method of production. At the same time, one should take into account the reverse influence of ethics on the development of production relations. Therefore the decree of the CPSU Central Committee, "On Measures for Further Developing Social Sciences and Increasing Their Role in Communist Construction," adopted as early as 1967, attention is devoted to the need to strengthen the role of ethics in the education of workers. Since this decree we have published a number of books and brochures on ethics and the "Dictionary of Ethics," edited by I. S. Kon has been through several editions. But they do not reflect well the practical aspects of ethics of job relations.

In this article we are offering certain advice based both on literature sources and on data from our own observations, and we are trying to relate them to the daily functions of management and the situations in which managers find themselves in practice.

Smile to People

It is known that the level of productivity of labor and the nature of interrelations in production depend on the mood. And the mood, in turn, depends on the circumstances of daily existence and the ability to control one's mood.

Regardless of when the workday may begin (morning, afternoon or evening) the basis of it is always the home situation: how people have rested, what relations are like in the family, and so forth. Here it is appropriate to refer to an experiment which any of us can conduct.¹ A smile and a greeting in the morning are a strong stimulator for a good mood for both spouses. But

the mood can be spoiled later—on the highway or in urban transportation. Crowded buses, streetcars and trolleys, especially during the peak hours, are a cause of irritation and, consequently, a bad mood. Is it possible to stay in a good mood under these conditions? It is. Recall what you learned as a child: if you have pushed someone excuse yourself. Any incipient argument can be extinguished with a joke and a smile. Hence the first piece of advice:

Learn to control your behavior in any conditions. Be gracious and polite. Smile to people. Try to maintain a good mood both in yourself and in those around you.

We Shall Greet One Another.

Well, the author does not think of us as people at all—you object. We can already greet one another without him. Of course you can. But remember, have there not been awkward situations related to such an extremely simple action as a greeting. There have been? So smile. And read on until the end.

The last one to enter a room must (regardless of his official rank) be the first to greet those in attendance. And those in attendance respond not in chorus, as in class, but only those who are sitting nearest, to whom it is convenient. When meeting a large group of acquaintances it is hardly necessary to shake hands with everyone in turn. But then if you have stopped and offered your hand to an acquaintance who is speaking with one or two people you do not know, be so good as to greet all of them, giving your name as when you first meet.

It has become a tradition that the subordinate greets his superior first, but the superior should offer his hand to shake. Incidentally, there is an exception: if the superior meets a woman he is the first to say hello, even if she is his "personal" secretary. And there is an exception to this exception: it is no disgrace for a young girl to be the first to greet her superior.

It is very nice when the chief is the first to greet a labor veteran who is older than he is.

It sometimes happens that the manager does not respond to greetings from his subordinates. Such behavior inevitably undermines his authority.

Why do we have so much to say about such trivia as greetings? But people's mood before they begin their work day is of essential significance to our work. Hence the second rule:

When coming to work greet your colleagues. Let them understand that you are glad to begin a new work day with them, that they can count on your assistance and support.

Between "Thou" and "You"

The superior who addresses everyone using "thou" is usually regarded as "his own person," someone simple-hearted and accessible. But one must know that not everyone likes this manner. There are many people to whom this seems to

be a sign of poor upbringing. Of course, the manner of communication among colleagues in work depends on the condition of interpersonal relations. If these relations are benevolent or friendly it is quite appropriate for them to address one another using "thou."

The manner of address between superior and subordinate is especially important. If the superior addresses one of his subordinates using "thou" and others using "you," he gives the impression that he has favorites. There is also another variant: the chief disdainfully addresses some using "thou" and respectfully addresses others using "you." In both cases the consequences are negative.

Nor is it proper to address everyone using "thou," which leads to a reduction of demandingness and labor discipline as well as to favoritism.

The pronoun "you" is not only an expression of the culture of communication, but also a necessary instrument for maintaining the proper distance and labor discipline. Here it is appropriate to recall that V. I. Lenin addressed everyone—the people's commissars and the rank-and-file peasants—using "you."

And so, we formulate the third rule:

Addressing subordinates using "you" is a necessary instrument for maintaining normal relations and labor discipline.

On Equal Basis

Gatherings, meetings and conferences are collective forms of management. Their effectiveness is achieved when the questions set for general discussion are considered under equal conditions—regardless of the rank, age, length of service and so forth.

In practice these conditions are far from always met, especially by autocratic managers. Rejoinders and open insistence upon their opinion, which is sometimes questionable or even wrong, destroys the desire in the subordinates to participate in discussions and forces them to be in the ranks of the "silent ones." And yet this does not help anything. Therefore we advise adhering to the following rules:

Show a maximum of benevolence to participants in conferences. People come to them in order to develop management decisions, in which the manager is primarily interested.

Learn to listen patiently to others, do not argue with them, do not reject proposals that are made simply because you do not agree with them, let others have their say, and encourage activity on the part of participants in conferences.

The Order and the Request

In practice business executives give instructions to their subordinates in basically two forms: the order and the request. But these forms are far from

always used in keeping with the situation. And sometimes when a polite request will do one hears an order, sometimes even accompanied by the threat of punishment.

We do not advocate all-forgiving liberalism. The do-nothing and the loafer must firmly taken in hand and sometimes it is also necessary to threaten them with punishment for a negligent attitude toward their duties. The order is necessary under extreme conditions: when there is the threat of a failure to fulfill an important assignment, a violation of the rules of accident prevention, and so forth. But these strict forms of instructions should not become the basic method of administrative management. With time subordinates will no longer react to the threatening tone, and the effectiveness of the orders will decrease.

But which forms of orders are appropriate in everyday working conditions? The order is necessary when giving instructions that are in the realm of direct responsibilities of the subordinate. But the tone must always necessarily be polite.

There is no doubt that tension frequently arises in work relations. As questionnaires show, under the conditions of various kinds of shortcomings it is difficult to keep from being rude. We do not share this opinion. And experience confirms that in any condition it is possible to maintain a businesslike tone in job relations without detriment to production, but, rather, to its advantage.

Instructions that are not in the range of duties of a given subordinate should be given in the form "I request." In general this form of instruction is received more favorably by subordinates and, naturally, they are more willing to carry it out.

We formulate the fifth rule of ethics of job relations:

In any situation maintain control of yourself; be polite when giving instructions to subordinates;

Remember that subordinates receive instructions better in the form of "I request" than "I order."

Be Grateful, But Also Exact

Encouragement and punishment are the essential instruments of labor activization and education of workers. These measures are incomparable in terms of their significance. But experience shows that encouragement exerts a greater influence on the labor activity of the people than punishment does.

Hence the conclusion that it is necessary to skillfully utilize measures of encouragement more frequently.

While giving preference to them we do not reject measures of punishment, but elementary norms of ethics should be observed here.

It is wrong to use the same measure of punishment for workers of various ages, sex and temperament for similar misdeeds. For example, for an older man or woman it is better to take them aside and make a polite remark. And for a young person or someone who is lazy it is more useful to make the remark publicly and make it stronger.

It is useful for every manager from time to time to turn to the experience of the outstanding pedagogue A. S. Makarenko. Also interesting in this respect is the experience of the well-known former brigade leader, Hero of Socialist Labor V. Serikov. In his extremely instructive reminiscences about brigade service he discusses how he managed to develop a leading worker and then also a brigade leader out of a former drunkard and do-nothing.²

The sixth rule of ethics of job relations:

Be attentive to your subordinates, notice every one of their successes in work and encourage them for this. A simple "thank you" said at the right time can be no less effective than a monetary bonus received along with the wages;

If there is a need to punish someone for errors on the job, be fair and tactful. When selecting the form of expression and the measure of punishment, take into account the age, sex and temperament of the worker.

Understand and Assist

Many managers have to hold office hours for people with personal and job-related requests. This is a very responsible function which is of great political and educational significance. The meetings between the manager and the visitors regarding personal problems are always a case of relations between personal and state interests. The condition of these relations depends largely on how the reception is conducted (in an organized or disorganized way) and how the issue is resolved (fairly or unfairly).

One of the authors of this article attended a reception held by the director of a large Krasnodar enterprise. A worker came in with a complaint about another worker. When discussing the unhealthy relations between them, she started to cry. At this time the telephone rang and the director was distracted.... Having completed the telephone conversation he addressed the visitor: "Well now, tell me again what happened there?" The woman was silent. It was difficult for her to repeat the scene which had evoked tears. In order for such a situation not to be repeated in the future, the director decided not to receive phone calls during the time when he was receiving visitors.

The author was witness to a situation when another director made an obviously unfair decision concerning transferring someone to another job. Obviously, it would be more useful for the director to receive visitors with the participation of the chairman of the local committee and perhaps even the party committee secretary. Joint relations to issues regarding personal affairs reduce erroneous decisions to a minimum.

The seventh rule of ethics of job relations:

Recall the political and educational consequences of your decisions regarding personal issues;

During visits with citizens regarding personal issues do not be distracted by other kinds of work, and be tactful and fair in your relations with the visitors.

Criticism and Ethics

One can frequently hear: Nobody likes criticism. Sergo Ordzhonikidze put it this way: "Criticism is not a girl, you cannot love it. It is a medicine which must be taken."³ One must not abuse criticism just as one cannot neglect it. Criticism has three directions: from above, from below and from within (self-criticism). In practice each of these has its ethical features and problems.

Criticism from above, as we know, develops unimpeded. But there are problems here too. They can be reduced to moderation and tact. Constant trivial reproaches and verbal explosions demoralize the workers and undermine their beliefs in their force and the justice of the management.

When selecting the forms and methods of criticism of subordinates, experienced and educated managers always take into account the age, sex and temperament of the people being criticized. It is known, for example, that women are more sensitive to these remarks than men are. Choleric are more excitable than phlegmatics. These features and peculiarities must also be taken into account.

Practice and numerous articles show that the greatest obstacles are to criticism from below. A negative attitude toward such criticism is fairly widespread even now. In one of his statements the member of the Politburo of the CPSU Central Committee, First Secretary of the Central Committee of the Communist Party of the Ukraine, V. V. Shcherbitskiy noted that many take criticism from below like poison and take vengeance for it.⁴

It is difficult to fight against this vice using methods of ethics alone. But still we shall offer some advice and remarks.

A labor collective of any modern enterprise or institutions consists of highly educated workers. And when one of them offers constructive criticism of his manager, in 99 cases out of 100 he is concerned about the work and is trying to raise the level of management. If the manager listens to the remarks of his subordinate, the one doing the criticizing gains a stronger feeling of being a co-owner and at the same time his respect for his manager grows.

There are no fewer difficulties with self-criticism. People are inclined to overestimate their capabilities and less frequently notice their weaknesses. At one time Academician A. A. Tupolev noted: "People are optimists. They see the advantages of their ideas immediately and well, but the shortcomings they see not immediately and not so well...."

We formulate the eighth rule:

The mechanism of criticism is a powerful means of influencing people which should be used skillfully and cautiously: do not abuse it, do not belittle the merits of people with rude critical remarks and do not allow criticism to grow into an elementary argument.

Do not scorn constructive criticism from below. It will relieve you of mistakes and omissions in your work and strengthen your ties with the collective;

Be self-critical--this will only strengthen your authority.

Subject to Unconditional Censure

In job relations, as in all other forms of social relations, it is important to develop and support a feeling of the personal worth of each worker, initiative and a creative approach to work.

The so-called "conflict-free people" who submissively follow all orders and instructions cannot produce anything good for our cause.

Clearly expressed forms of subservience like those manifested by the Griboyedov hero Molchalin are rarely encountered now. But in more delicate, externally less noticeable forms, subservience and boot-licking can be observed fairly frequently. They are manifested in various forms: blind submission to one's leaders, unconditional agreement with everything the superior says, and praise of higher leaders. The boot-lickers and subservient people through their behavior morally degrade not only their superiors, but also the entire atmosphere of the labor collective.

The absolutization of the principle of one-man management which is still encountered contributes to the appearance and existence of toadying. Absolute rule which is relatively unrestricted in certain collectives creates prerequisites for job abuses and lordly ways, as well as boot-licking. These are two sides of the same coin. It seems that expansion and refinement of the prerogatives of the agencies of social self-management will serve as an important measure in maintaining social norms of ethics for job relations.

And so, let us formulate the ninth and last rule for job relations:

Value independent people and avoid the importunate services of toadies. This way you will contribute to strengthening the healthy psychological microclimate in the collective and increasing the overall effectiveness of management;

Do not abuse the right of one-man management and consult with social agencies for self-management regarding all principally important issues in nonoperational management.

Dear reader, we do not think that with nine rules you will be able to grasp all aspects of the ethics of job relations. We think that these will serve as a part of a discussion of this crucial and extremely delicate subject. We hope that you will also formulate for yourselves other rules of job relations which are so necessary for increasing the culture of communication. It should be clear to everyone that it is unthinkable for man to exist in a communist society without developing a high culture of communication. One of the leading levers in this matter is the strengthening and development of socialist norms of ethics in job relations.

We see paths to the development of socialist ethics of job relations in three directions: the first is a comprehensive and radical improvement of the system of control of labor activity. Here we should like to refer to the statement by Academician V. A. Trapeznikov: "It is necessary to arrange the system of management in such a way that it reproduces in working people the character traits which we need: efficiency, creative sharpness, a sense of responsibility, and a desire for correct information...."

The system of control is the most dynamic and the leading part of our daily social life.

The second path is training personnel in the ethics of job relations. Up to this point, for example, we have not seen a single training program for management which has a section or a subject concerning the ethics of job relations. It would seem that this gap should be filled.

And, finally, the third path is the mass publication of aids and references regarding the ethics of job relations.

FOOTNOTES

1. See EKO, No 5, 1978.
2. Serikov, V., "Dogovor po sovesti" [An Agreement of Honesty], Moscow, 1984.
3. See PRAVDA, 24 May 1972.
4. See PRAVDA, 5 August 1984.
5. See EKO, No 3, 1981, p 121.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

BOOK ON ECONOMIC BALANCE REVIEWED

Novosibirsk *Ekonomika i Organizatsiya Promyshlennogo Proizvodstva* (EKO) in Russian No 9, Sep 86 pp 185-190

[Review by Ye. G. Yasin, doctor of economic sciences, Central Economics and Mathematical Institute of the USSR Academy of Sciences (Moscow) of the book by Belkin, V. D. and Ivanter, V. V., "Planovaya sbalansirovannost. Ustanovleniye, podderzhaniye, effektivnost" [Planned Balance. Establishment, Maintenance and Effectiveness], Moscow, "Ekonomika", 1983]

[Text] Commodity and monetary balance is the correspondence between the mass of money and the quantity of material resources and services. If the latter are greater, there is an overstocking, the supply exceeds the demand, and expenditure exceeds revenue—a phenomenon that is quite familiar to both consumers and businessmen. The causes, consequences and ways of overcoming the deficit are at the center of the attention of the book by V. D. Belkin and V. V. Ivanter, one of the truly professional investigations on this subject.

Planned balance is a multifaceted phenomenon. The authors single out three aspects: material—between resources and demands, financial—between incomes and expenditures, and material-financial or commodity-monetary. The first two have been more or less developed both in theory and in practice. The inadequate attention to the third does not correspond to the crucial and complex nature of the problem. Therefore it is justified that the authors have focused precisely on it.

As was noted in the report by the chairman of the USSR Council of Ministers, N. I. Ryzhkov, at the 27th CPSU Congress, "In its social policy the party attaches principal significance to fuller satisfaction of the growing effective demand of the population. It would not be an exaggeration to say that today this is one of the most crucial tasks. Directly associated with its solution are the strengthening of material incentives for labor, efficient utilization of nonworking time, the attitude of the Soviet people, and the surmounting of negative phenomena generated by the deficit."

A central point of the book: commodity and monetary balance can and should be provided, and it is necessary to put an end to the deficit. This would seem to be obvious. But the issue is not so simple. For to one degree or another the deficit has existed in various stages of the development of the Soviet

economy. Bourgeois science proves that it is organically inherent in the socialist planned economy. Soviet economists have not always provided a worthy rebuttal to such assertions. Workers of planning agencies and businessmen, as though reconciling themselves to the problem, have not exerted the proper efforts in order to provide a radical solution to it. V. D. Belkin and V. V. Ivanter convincingly prove that the deficit is not only inherent in socialism but, on the contrary, stands in contradiction to its economic laws and principles. This phenomenon is so tenacious because it is supported by certain forms of management. Analyzing the causes for the deficit, the authors point to concrete shortcomings in planning, price-setting, and the formation of incomes and the finance-credit system.

Material balance is now considered primary in planning. In order to achieve it a detailed list for the production of products is planned and funds are distributed centrally. Financial indicators are regarded as secondary, deriving from physical ones. The main path to eliminating the shortage is seen in increasing production. It is difficult to object to this, but everyone knows that while we produce more iron and steel than anyone else, we still have a tighter balance of metals. We need something to limit demand, and this could be financial resources which form the demand. But if they are allotted as before for given funds, they are not capable of fulfilling this role: for now it is important to obtain capital, and the money will be found later.

The distribution of capital is the equivalent of a card system, which in itself generates an artificial deficit. Now "the country has such a volume of resources that their distribution according to capital is maintained only as a result of unsatisfactory commodity and monetary ties" (pp 14-15). This is true, but something should be clarified. Sometimes one hears: It is impossible to refrain from storing up funds as long as there is a shortage, that is, as long as there is no balance. But the storing up of funds is one of the reasons for the deficit. It is possible to achieve a momentary balance of money and material resources, but as long as funds are being stored up new violations are quick to appear.

Another most important factor in providing balance is the price. The authors think that the utilization of prices for these purposes "should not be considered to be an extraordinary measure" (p 25). Indeed, prices can maintain balance (especially structural balance—for individual groups of products) or disturb it if they are based only on current outlays without taking into account the ratios between resources and demands.

The book under review gives the following concept of price setting: socially necessary expenditures are reflected best of all by the industrial price; prices which balance supply and demand since they deviate from the production prices are acceptable only when changing the economy over to a condition of general equilibrium; after this changeover only the model of the production price should remain. The authors object to the arguments of those economists who suggest planning prices taking into account the shortage of prices, including in them profit in amounts necessary for planned expansion of production.

But the idea that the production price is the ideal and the price of the balance is only a step toward the ideal seems doubtful to us. Since equilibrium is only of the moment. It is constantly being violated with the dynamic development of the economy. But equilibrium is not even necessary at each moment, and the main thing is to have a mechanism which does not allow excessive deviations, one which causes the economy to approach a condition of equilibrium. The prices of the planned balance or prices of expanded reproduction suggested by N. Ya. Petrakov could become an element of this mechanism.¹ But by no means should this be the production prices which, even if they reflect socially necessary expenditures, do this only in a condition of equilibrium.

Not all factors conditioning the commodity and monetary balance of the economy have been considered in the book in the same amount of detail. For example, the influence of the processes of the formation of income have been treated only in passing.

It seems that the book's analysis of the influence of the current organization of finances and credit on the state of balance is truly successful. It was noted at the 27th CPSU Congress that recently there has been a weakening of the financial and credit influence on the economy. The bad practice of redistributing incomes, whereby the losses of the backward enterprises, ministries and regions are covered through the profit of those that are operating well, has become large-scale. This undermines cost accounting, gives rise to dependency, and orients them toward endless requests for assistance from the center. Credit has lost its true purpose. The most important task of finance and credit agencies is not minor regulation of the activity of enterprises, but economic stimulation and strengthening of monetary circulation and cost accounting, which is also the best monitor.

In a planned economy, what can be the source of surpluses of money and circulation, which gives rise not only to structural, but also a general, volume imbalance? After all, all financial balances, including the budget and the balance of the credit system, are drawn up without a shortage; the emission is strictly controlled.

V. D. Belkin and V. V. Ivanter draw attention to the fact that part of the budget income is introduced in the planned sums before the sale of products. And in the guise of deductions for profit into the budget they frequently "draw in" internal circulating capital of the enterprises and bank resources. Profit and material supplies grow, budget incomes increase even more rapidly, but the internal circulating capital decreases. This turns out to be possible because expenditures of the formation of the supplies are not included in the production cost, and this means they are not subtracted from the profit.

But the immediate source through which surplus money goes into circulation is the credit system. Money issued in the form of credit increases credit resources, and when the balance is disturbed this leads to the formation of a surplus of the mass of money. The authors give this example. A textile combine has not fulfilled the plan for the output of fabrics or else they have not been sold. The money spent on the acquisition of the fabrics (q_1) has remained unexpended and has been transformed into a resource for credit.

This has been granted to the plant in the form of loans for payment for accounts to the suppliers for metal, which was the formation of surplus supplies. The "above-plan" monetary resource has become a source of credit for "above-plan" supplies. The supplier has paid wages from the funds he has received (q_2) and therefore the wage fund has not decreased. A third enterprise, not having received metal, has failed to produce household instruments that are in demand. The idle time of the workers who were supposed to have manufactured these must be paid for (q_3). Again, the bank issues a loan from resources which it has formed as a result of the fact that the household instruments have not been purchased. Again "above-plan" needs are covered through "above-plan" resources. Formerly, the credit balance has not been violated, but the money ($q_1 + q_2 + q_3$) does not have any material to cover it (p 56).

Of course the credit resources are limited by the credit plans. But the limits are an unreliable barrier. When the credit indebtedness increases, there is a greater danger of a chain of payment failures in the national economy. In order to prevent this the bank must break the chain—by issuing loans to cover in excess of the limits. The fact is that the limits serve as an instrument for administrative control in the activity of the bank. This control is not very effective unless it is based on adequate economic relations and strict mutual responsibility of the economic partners. The management of investments is especially sensitive to shortcomings in administrative control. The authors show that if credit is not released from administrative regulation, just as before it will not serve to increase the effectiveness of investments.

In the opinion of the authors of the book under review, it is necessary to increase the role of the balance of the national economy, giving it the status of a plan of the upper level. This will essentially simplify the coordination of planning assignments and the interests of cost-accounting units as well as the formation of stable planned economic normatives. The book devotes special attention to financial and credit balances. The summary financial planning, the first attempts at which were made at the beginning of the 1930's, is now limited to drawing up the balance of financial resources for the planned year. This balance is a calculation and analytical document and provides for balance of material and financial proportions in the national economic plan.

The monograph suggests a system of financial balances which could be included in the balance of the national economy and become an instrument for planned maintenance of commodity and monetary balance. The authors note that of all the current constituent parts of balances only the balance of incomes and expenditures of the population coordinate money and material resources, and the others are purely financial documents. V. D. Belkin and V. V. Ivanter again recall the useful suggestion of I. S. Malyshev, which was not given the proper credit at the time, concerning the construction of a balance of incomes and expenditures of the enterprises. Its essence is that the balance includes earnings from the sale of products and also expenditures on wages and the acquisition of material resources. That is, the financial resources are coordinated with the material to cover them. To be sure, in the opinion of the authors, this balance can only conventionally be called a balance of incomes and expenditures since revenue is not the same thing as income, and

the income of the enterprises is not a source of wages. They are speaking rather about a balance of monetary circulation. But this is not a matter of names. It is precisely this kind of balance that is necessary to coordinate material and financial proportions. V. D. Belkin and V. V. Ivanter take advantage of the principle of his construction in their system of balances. For balance and other economic calculations and analysis of the balance of the national economy they suggest the model of "income—commodities" and describe it in detail.

The bank system has economic information that is unique in its completeness, coordination and reliability, which is obtained as a byproduct of its basic functions. Unfortunately, this information is put to extremely little use so far. In the opinion of the authors of the book under review, it is very useful for the development of the aforementioned system of balances. They also suggest methods of augmenting data from payment and calculation documentation. The book convincingly reveals the possibilities of the bank in strengthening the discipline of deliveries and accounts, forming centralized incomes, accelerating economic circulation and increasing the return on funds, including capital investments. Attention should be given to the authors' idea that bank influence is not determined by the amount of credit. If the justification for issuing the loan is not the effectiveness of the utilization of funds, the increase in credit can reflect not the force of the controlling influence of the bank, but its weakening and violation of the balance (p 145). Conversely, credit taking effectiveness into account would contribute to balance and strengthen the bank's influence with relatively smaller amounts of credit.

It would be impossible to list all of the interesting and crucial issues raised in the monograph or to discuss all the ideas and suggestions of the authors. We are convinced that it is worthwhile to read this timely and useful work.

FOOTNOTES

1. Petrakov, N. Ya., "Concerning the Reflection of Planned Material-Substantial Proportions in the Price System," *EKONOMIKA I MATEMATICHESKIYE METODY*, 1983, Vol XIX, Issue 2, pp 228-242.

COPYRIGHT: Izdatelstvo "Nauka", "Ekonomika i organizatsiya promyshlennogo proizvodstva", 1986

11772

CSO: 1820/5

END OF

FICHE

DATE FILMED

Feb 3, 1987